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ADDRESSES.

SECTION OF LARYNGOLOGY, NINTH INTERNATIONAL MEDICAL CONGRESS.

INAUGURAL ADDRESS OF THE PRESIDENT,

W. H. DALY, M.D.,

OF PITTSBURG, PA.

GENTLEMEN:—It is gratifying to see so many of my American confrères here to redeem the pledge made for them at Copenhagen, Denmark, in 1884, that an American welcome should be given the International Medical Congress at this, its ninth, meeting. It is also a source of highest pleasure to meet those present from foreign lands, many of whose familiar names in the growing literature of Laryngology remind us that we are not altogether new acquaintances. With many of us our memories revert at this time, with renewed freshness and pleasure, to our last meeting in the Capital City of the Kingdom of Denmark; the home not only of the sturdy Norseman, but of the most accomplished medical scholars; where both King and Nation gave up their country to the good of the Congress during its meetings; and where every one, from ruler to peasant, united in showing their Nation's guests what the full meaning of the Norseman's hospitality was; so quiet, so restful, so complete that it comes back to us at the end of three years as though it was a quiet happy dream of ours in a Norseman fairy land.

We scarcely hope that it is possible for us to be so successful, but if we can secure a degree of the happiness and profit realized by all of us in Denmark, in 1884, then I think we shall have been successful.

To one and all, however, not only to personal friends from across the seas, whose familiar faces I see before me, and to whom I am indebted for early and valuable training in laryngology, but to all, I bid a heartfelt greeting and cordial welcome. And though we may not attain the perfection of the great meeting at Copenhagen in 1884, yet I beg all of you to feel that the broad bosom of this beautiful land is happy in being your resting place, and its people feel the high honor that is accorded them in being permitted to entertain the worthy representative medical men from foreign nations. We sincerely trust that none of you will leave this, our Nation's Capital, without inspecting its resident localities, as well as its public buildings. The National Museum; the Museum of the Army; the Smithsonian, and other institutions. None of these collections suffer by comparison with the famous collections of the old world. In fact, Washington City is, by these institutions, placed in the front rank as a repository of scientific learning.

We ought to congratulate ourselves as laryngologists, in this our second meeting as an independent Section of the International Medical Congress, and endeavor to have the work of this branch of medicine placed in every large medical body as an independent Section, as the importance and growing excellence of its literature and valuable practical work deserves.

When one looks back to the state of laryngology in 1876, and makes a comparison with the present status of it, it becomes a matter not only of the utmost interest, but of satisfaction and pride to those who have been engaged in its study and advancement, to note what alone its cognate branch, rhinology, has done for the successful and rational treatment of hay fever, which, before the appearance of a paper which I read before the American Laryngological Association in 1881, calling the attention of the profession to some observations I made during a few previous years, upon the local predisposing intranasal causes of this disease, the sufferers therefrom had spent a rambling sort of life in seeking immunity from what they can now, in a large percentage of cases, easily get cured, permanently and surely, at home, by a proper rational treatment.

I desire to say, however, that the lamented Hack, and some other able writers in the same field, claimed more for the plan of treatment I then advised than I ever did, as I then, in 1880, assumed to postulate. I still find it, after seven years, strongly tenable, viz: "Whether we are warranted in believing any case of hay-asthma purely a neurosis, without first eliminating the possible causation due to local structural or functional disease in the naso pharynx." Therein clearly admitting that a proportion of cases were of the character of neuroses, but a far greater proportion still depended on a chronic intra nasal disease, upon which the exciting cause, viz., pollen, and other agents, act with effect; and second, without this intrinsic nasal disease the exciting cause is innocuous.

I am firmly of the belief that the workers in our special branch will yet make the local treatment so complete that we will cure still a larger percentage, even to all the cases of hay asthma that present themselves. This is a hopeful and zealous view of

the future of hay fever, but I nevertheless expect to see this realized.

There are few laryngologists but have constant opportunity of observing the rapid development and growth of puny children, after having been under the treatment of the throat specialist, and their noses and throats put in proper order, so that the filthy catarrhal discharges are no longer swallowed, and the upper air passages are opened up, so that during sleep they can get a plentiful supply of air; hence physical thrift and comfort quickly change the weakly constitution to a strong one.

I think no working laryngologist can fail to note the growing importance of rhinology; and I am free to say the opinion I expressed in a paper before the Eighth International Medical Congress, at Copenhagen, viz., "That the Laryngologist of the future must be more the Rhinologist, and the Rhinologist more the Surgeon than the Physician," has been fully borne out by the evidence afforded by our literature alone.

There can be no question that a large proportion of the inflammatory diseases of the larynx are secondary to an initial disease of the intra-nasal cavities of a like inflammatory character. This I have repeatedly verified by years of observation, and frequently publicly so stated in our deliberations, and I am pleased to say that the number of my colleagues who have since also verified this to their own satisfaction is an ever-increasing one; the number containing, as it does, some of the most successful and distinguished practitioners in this special branch of medicine. Of the aid modern rhinology has been in our successful prevention and treatment of internal and middle ear diseases alone is scarcely calculable. The fact is apparent that no aurist can be accomplished in his special work who ignores the facilities afforded him by a careful study of the concomitant and too often initial disease of the intra-nasal cavities.

But, gentlemen, time passes, and I must not further dilate upon the advancement of our important specialty and its cognate branches, but the bright minds who are now devotees of its service, and future workers, will place it higher and higher, till it reaches its zenith of excellence and usefulness to humanity.

As you observe by the printed programme, there are an abundance of papers from able writers from many lands, upon most attractive subjects, and the valuable time of the Section must not be taken up either by your President or any one else to the exclusion of others, I will therefore set the example of brevity by making my address short. I feel I have your kind wishes and that you will aid me in expediting the work of the Section from day to day, adhering ourselves strictly to the time permitted to each member under the rules, viz., twenty minutes for the reading of a paper, and ten minutes for each speaker engaging in the discussion thereof, I shall hope that each member will be promptly here at the hour to which we adjourn, so that we can begin our work and continue it without undue haste as the session advances.

But, friends, we are solemnly reminded in these living moments, as we enjoy our happy greetings of old friends and new, "from lands of sun to lands of snow," that there too is an increasing number of the goodly names of our honored dead, who worked and won fame in the fields we now cultivate, while they are personally the silent members of this, our Ninth International Medical Congress, yet through every one of you their names and voices and words of wisdom will be heard as you speak at this, for the time being, the World's Medical Forum, to your absent colleagues in every land and clime. Their names are on the lips of every student of laryngology, and their words will always stand a part of its growing and valuable literature; and while their fame is our pride, let it also be our aim to emulate the higher traits of character and the ability that won for our Elsburg, Krishaber, Foulis, Bruns, Waldenberg, Buro, Böcker, and Hack, the distinction that made their teachings as beacon lights to guide their less gifted brethren in the fields of laryngological science. Oh, honored dead! we in spirit strew flowers on your tombs, and join hand in hand while we bless the memory of your worthy lives, and mourn the events of your too untimely deaths. A part of this number were young men, cut off in the growing beauty and strength of manhood, with all the zeal and enthusiasm of their scientific labors still fresh upon them. May the earth rest lightly over them in the respective lands where their devoted bodies lie. The lamented, the honored dead of our ranks.

ORIGINAL ARTICLES.

OBSERVATIONS ON DISPLACEMENT OF THE CRYSTALLINE LENS FROM CONGENITAL AND OTHER CAUSES.

Read in Section on Ophthalmology and Otology, at the Thirty-Eighth Annual Meeting of the American Medical Association, June, 1887.

BY J. L. THOMPSON, M.D.,
OF INDIANAPOLIS, IND.

Case 1.—A. L. B., æt. 17 years, consulted me for glasses some years ago, when it was found that he had displacement of each lens toward the temporal side, with tremulousness of the inner half of the iris. A mydriatic was used, after which the inner edge of the lens was to be seen a little to the nasal side of a line dropped vertically through the centre of the pupil. With the ophthalmoscope the optic discs seemed to be double, one through the edge of the lens and one in the aphakic portion, which, of course, was due to the prismatic effect of the periphery of the lens. Vision in each eye = $\frac{20}{20}$, with — 6.00 D. sph. It was evident, though, that the aphakic or inner portion of the eye was hyperopic. He was seen four years afterwards, when no change was found in structure, refraction, or acuity of vision.

Case 2.—W. R. H., æt. 35 (accidentally found to be a cousin of the above), called upon me on December 10, 1884, on account of a terrible neuralgic

pain in the left eye of three weeks' duration. It was very much congested, the tension + 2, V. = simple perception of light, and the lens was dislocated into the anterior chamber. The membrane of Descemmet was partially opaque and striated from contact with the lens, and the iris was dilated and discolored.

The condition of the right eye was as follows: Lens displaced outwards, just as in case No. 1, irido-donesis of the inner portion, and the lens bounded and rebounded outward and backward on the least motion of the eye, settling to the position described above when the organ was at rest. The lens of the left eye was replaced after the following method: The patient was placed upon a hard lounge, his head was violently shaken, lifted up and thrust backward, several times, but to no effect; pressure was then made upon the cornea with a vulcanite spoon, and by manipulation also through the medium of the lower lid; when, after repeated efforts, reduction was accomplished. Eserine was freely used, a pressure bandage applied, and he went to his hotel for the night. On the following morning the lens was seen to be behind the iris, which was still widely dilated; tension only slightly above normal. He was given a solution of eserine and sent home for a week. December 18, pupil still widely dilated; paralyzed, lens behind the iris, and as movable as in the other eye, membrane of Descemmet not so hazy as before. V. = $\frac{6}{6}$, with — 18.00 D. sph. In the right eye it = $\frac{6}{6}$, with the same lens. He was cautioned about stooping, straining, sneezing, etc., and sent home.

On December 28, 1885, one year from the date on which he was first examined, the lens of the other (right) eye became dislocated into the anterior chamber, causing the same atrocious pain which he had experienced before. It was reduced by the same methods resorted to in the left. Eserine quickly contracted the pupil. The iris of the other eye was still paralyzed.

On August 21, 1886, the lens of the first affected (left) eye had fallen below the centre of the pupil, and his myopia of 18.00 dioptries had changed to a hyperopia of 10.00 D. Three months later the lens of the second (right) eye fell from its moorings, when he required + 10.00 D. sph. for distant and + 18.00 D. spl. for close vision.

Case 3.—C. F. H., æt. 24, a brother of the above, desired me to examine him for glasses in December, 1885. He had a tremulousness of the lower middle portion of each iris, with a tilting backward of the corresponding part of the lens. The optic discs looked very small and slightly elliptical. Right V. = $\frac{20}{XX}$, with — 8.00 D. sph. Left V. = $\frac{20}{LX}$, with — 5.50 D. sph. ◯ — 2.25 D., cyl. axis (unusual) 90°.

Inquiry as to the parentage and ancestry of these patients failed to show any intermarriage of blood-relations. A grandmother and an aunt were said to be very near- as well as poor-sighted.

Case 4.—E. C., æt. 31 years, was examined in February, 1884. Right eye staphylomatous, lens in lower part of ant. chamber and calcareous. T. + 3. V. = 0. Has suffered terrible paroxysms of pain in it for many months. Left eye quite painful during the last few weeks, lens in ant. chamber and adherent below to the posterior elastic lamina. The upper part of the lens is tilted backwards, with the corresponding portion of the iris. V. = $\frac{20}{6}$, with — 6.00 sph. He says that he has always been near-sighted, and that a competent eye specialist told him years ago that his lenses were dislocated; that until a short time ago they would float about and come forward, but he could always replace them by a sudden movement of the head backwards. I advised enucleation of the right eye, and did it under the influence of an anæsthetic. While under the chloroform an effort was made to replace the left lens, but it was found to be too adherent to both iris and cornea for anything to be accomplished short of unjustifiable interference. I therefore suffered him to return home, with orders to report again on the least change, expecting that sooner or later an iridectomy might be needed. He was not seen again until one year afterwards, when I found the lens very much shrunken, opaque, and still adherent to the iris and cornea. Doubtless the efforts at reduction had caused this change. V. = $\frac{20}{6}$, with + 10.00 D. sph. The eye free from pain.

Cases 5 and 6 were simple, congenital displacements directly outwards, in young persons, with irido-donesis, myopia, and reduced acuity of vision.

Cases 7 and 8.—These, in addition to the above-named symptoms, had corectopia. In both the pupils were exceedingly small, and were situated upward and outward. One of them had nystagmus also.

In none of these cases did the lens seem to be smaller than usual, and though I looked carefully for evidence of abnormal suspensory ligament, neither oblique illumination nor the ophthalmoscope enabled me to see any of its folds.

Spontaneous Luxations of the Lens.—These have been too numerous to record short of wearying you. I will therefore simply mention a few points concerning them. The largest number have occurred in cataractous patients who were past the meridian of life; though I have seen it by no means infrequently in youthful persons. Some of these have been seen almost from the very point of departure, and on through all of the various changes to the end. The following may be considered typical ones:

Case 9.—A. C., æt. 74, of full habit; right eye lost from corneal opacity following ulceration and treatment with ground glass when a youth. Left lens slightly opaque. I saw this patient from time to time for several years during the progress of ripening of the cataract, until he became very impatient, and anxious to have something done. I then told him that if on his next visit to me, six months hence, it was not ready, I would hasten it by an iridectomy. When he returned, a slight luxation with irido-donesis was to be seen. I refused to operate until further changes were manifest. He left me much disappointed and went to another, had his lens extracted and, as I learned subsequently, lost much vitreous and became totally blind.

Case 10.—A feeble gentleman, æt. 76, had senile cataract in both eyes. The left lens was slightly

luxated downward, so that by artificial mydriasis he could see a little above the periphery of the lens. I made a small iridectomy upwards, which was followed by a slight escape of vitreous, but it gave rise to no immediate trouble. He recovered nicely, could see to read very small type with + 16.00 D. spl., but, in about three months after the operation, the lens settled still lower, pressing upon the ciliary body, and he suffered most terribly until his death, which was supposed to be from softening of the brain. His vision, however, remained remarkably good until the end.

Case 11.—W. W., æt. 44, was seen in 1876 with matured cortical cataract in the left eye, which had been blind several years. He never had injured it, there was no tremulousness of the iris, V. = simple perception of light. Right eye normal, V. = $\frac{12}{12}$. In 1882 a little opacity was to be seen in the right. In 1884 a slight shaking of the iris could be noticed in the left. The right gradually went on to blindness, but I refused to extract until he had abstained from liquor for three months (he was a steady drinker). An extraction was made with great ease, and he did well until the fifth day, when a hæmorrhage from the iris took place, followed by a very high degree of inflammation which closed the pupil. An artificial one was made twice subsequently, and these also closed. We finally succeeded in obtaining V. = $\frac{1}{20}$. He became anxious to have the left lens removed, but I made a downward iridectomy first, hoping that something might turn up before attempting to extract. A small amount of vitreous escaped as the knife was withdrawn, but he did well for four days, when a hæmorrhage took place. After all the blood had disappeared, a most beautiful keyhole-shaped pupil was to be seen, at the lower part of which a narrow, jet-black portion showed that a space existed between the lens periphery and lower corneal margin. The lens trembled very much on the least motion of the globe. This opening enabled him to walk about in moderately familiar places; indeed, all about our city, but not enough to satisfy his desires, so that I was constantly entreated to do something more. I really feared to touch it, as it was practically the only eye he had, and in the light of my former experience with him, I expected its loss to follow an extraction. He then visited many others of our profession, but fortunately they did nothing. Over and over again did he visit me, and there hung the shaking lens, which almost tempted me to loosen its attachments, when, about nine months ago, he called upon me suffering the most excruciating pain in it, the cause of which I was at a loss to account for. He was given a little cocaine and atropia, with orders to report again in a few days. I saw nothing further of him for one month, when he presented himself with a beaming countenance and an almost clear lens, it having become liquefied. Only a few minute specks were to be seen floating in its substance, and a few striæ hanging from its posterior border into the vitreous humor. His vision = $\frac{12}{12}$, with + 11.00 D. sph., and has remained as good until the present date, when I see him every day riding or driving about our city.

Case 12.—Traumatic Luxation of the Lens.—Patrick D., æt. 55, dislocated his lens into the anterior chamber by striking it with a "spaul" of stone while cutting rock in Ireland, thirty years before I saw him. He says that his eye pained him terribly after the accident and he became blind. He again struck his eye in the same way and manner and again suffered fearfully. I found him, three weeks after the accident, with an iritis, an opaque lens in the anterior chamber, and tension + 2. His lens was removed and an iridectomy made, when, after four weeks, his vision became remarkably good, = $\frac{12}{12}$, remaining so up to the present time, seven years after the operation.

Case 13 is a striking contrast to the above. H. A., æt. 59, was kicked by a horse a few years ago, which caused atrophy of the right eye. The left is hard as a marble, the pupil widely dilated, the lens clear and floating about in the vitreous as in so much water. The optic disc is atrophied and the central vessels curve abruptly over its edge. Vision is totally obliterated. And so one could go on with case after case showing the most opposite results from similar causes, were it not that you would accuse him of prolixity. I will therefore briefly remark on the above report as follows:

The three cases first mentioned corroborate the writings of others, as to the influence of heredity in congenital displacement of the lens.

Cases 2 and 4 lead one to the conclusion that an eye with a congenitally displaced lens is an exceedingly weak organ, and very prone to progressive luxation, to cataract and to glaucoma.

All of these cases were myopic, the myopia being due to lens anomalies and not to elongation of the eyeballs, as was proved both by the ophthalmoscope and by positive glasses, in the cases where the lens fell below the axis of vision.

The permanent paralysis of the iris in case 2, after contact with the dislocated lens for so short a time, seems to be a point worth our consideration.

I would also beg leave to call attention to the methods employed in replacing the lens in this case, and would suggest that, should one fail by all of these, he would be justified in evacuating the aqueous chamber by a free incision through the cornea; as every beginner knows that when he first attempted to extract a transparent, recently dislocated lens from the anterior chamber, no sooner was the incision made through the cornea than the lens bounded behind the iris, to his great mortification.

The most fruitful cause of spontaneous luxation of the lens is, as far as my experience has permitted me to judge, subacute inflammation of the uveal tract. Often have I seen it take place during the course of that many-named disease, "aquo capsulitis, keratitis punctata," etc. I further believe that it is often the cause of the acquired myopia ("second sight") of elderly persons. Not unfrequently, one meets with such patients whom he finds to be hyperopic, and who require strong positive lenses, even for infinite distance. Again do they call, stating that their glasses serve them no longer, and we find that they can read better without than with convexes,

and see better with negatives at a distance than without, but when we look into their eyes we often find the iris and lens much closer to the cornea than before, and generally a congested condition of the fundus, with floating particles in the vitreous humor.

Case 10 shows that the spontaneous cure of cataract is by no means impossible, that it cannot always be accounted for on the theory of a falling of the lens below the upper margin of the pupil, nor by that of traumatism and subsequent absorption; but that it does, in a small number of cases, first become loosened from its ciliary attachments, disintegrate, liquefy and regain transparency.

In luxations of the lens from traumatic causes, such peculiar and marvelous results are so often met with that, were a book written on this subject alone, it would take rank with the writings of De Foe and other similar authors, and the writer of it would be considered about as truthful as was Herodotus prior to the excavations about Nineveh and Babylon.

Résumé:

1. Heredity plays an important part in congenital displacement of the lens.

2. Congenital displacement is a dangerous anomaly which is very prone to progressive luxation, to cataract and glaucoma.

3. Most of the cases of congenital displacement are highly myopic, and the myopia is due to the malposition of the lens, and not to elongation of the antero-posterior axis of the globe.

4. Spontaneous luxation is in a very large proportion of cases due to congestion and subacute inflammation of the uveal tract, and the "second sight" or acquired myopia of elderly persons is often due to this cause.

5. Partial spontaneous luxation of the lens occasionally results in the spontaneous cure of cataract; not, as is usually supposed, by the falling of the lens below the upper pupillary margin, but by degenerative metamorphosis and subsequent liquefaction.

INJURIES OF THE FŒTUS DURING LABOR.

Read before the Philadelphia County Medical Society, October 26, 1887.

BY THEOPHILUS PARVIN, M.D., LL.D.,

PROFESSOR OF OBSTETRICS AND DISEASES OF WOMEN IN THE JEFFERSON MEDICAL COLLEGE, PHILADELPHIA.

Though injuries of the child during labor are not frequent, probably they are much less rare than commonly believed. In many instances they are recognized immediately after delivery, and they may spontaneously disappear, and in some their consequences are attributed to erroneous causes.

Some of these lesions may happen in spontaneous labor, and others in artificial, whether the interference be manual or instrumental. It is impossible to classify them according to their causes, and apparently the most satisfactory division is one resting upon the regions or parts affected. Hence, in the paper now presented, injuries to the fœtus in labor will be divided into those involving the head and neck, those of the trunk, and finally, those of the extremities.

Injuries of the Head and Neck.—Contused wounds of the scalp and of the face, and incised, punctured, and lacerated wounds of the former are met with. So far as contused wounds of the face are concerned, it usually happens that they follow difficult delivery with the forceps, especially if the instrument be a powerful compressor; so too these result if the blades are applied obliquely, or antero-posteriorly to the head instead of to its sides. But in most all cases the effects are trivial and soon disappear. Punctured and incised wounds of the scalp have been made by the obstetrician mistaking a caput succedaneum for the fœtal sac. Tarnier mentions an instance of a wound thus inflicted leading to the death of the child from erysipelas a few days after birth. More extraordinary is a lacerated wound of the scalp made in the effort to apply forceps, the operator introducing one of the blades between the scalp and the cranial bones. An example of this terrible blunder is mentioned by Charpentier, and I have met with a similar case.

Sloughing of a portion of the fœtal scalp has been observed following some cases of spontaneous labor. Thus, Priestley[1] has reported a case of this kind, resulting in death eight days after delivery; the labor was protracted for forty-eight hours because of a narrowed pelvic outlet. Lizé[2] of Mans, states that in the case of a multipara, 40 years of age, the waters ruptured five days before the birth of her child, which presented by the vertex, but occupied an occipito sacral position. Five days after delivery, a slough involving almost the entire extent of the occipital bone appeared; three days subsequently it became detached and the child recovered.

Bouchut[3] quotes from Lorain a case of gangrene of the scalp in a newborn child occurring in the service of Moreau at the Maternity. The mother was a primipara, and the labor lasted forty-eight hours, terminating spontaneously; the child died on the nineteenth day.

Dr. Goodell informs me of a case in which an oblique application of the forceps was made—one blade being in relation with the right frontal bone, and the other with the left occipital—and the right anterior portion of the head was so bruised that sloughing occurred a few days subsequent to birth; after the detachment of the slough a fatal hæmorrhage occurred.

Depressions and fractures of the cranial bones, separation of their union to each other, fractures of the bones of the face, as well as disjunction of their articulations and joints, have been observed more or less frequently in cases of difficult labor, manual or instrumental—some of them, indeed, in spontaneous labor.

In regard to depressions of the bones of the fœtal skull, some obstetricians have asserted that they are always accompanied by fractures. That was the opinion of Danyau, of Lachapelle, and of Schröder.

[1] London Obstetrical Society's Transactions, vol. i.
[2] Annales de Gynécologie, 1875.
[3] Traité Pratique des Maladies des Nouveau-Nés, etc.

But the following case,[4] given by Matthews Duncan, seems to strengthen the view held by most obstetricians, that such depressions may occur without the bone involved being broken. The case was one in which persistent digital impression was produced on the right parietal bone of a fœtus during birth, by the finger of the accoucheur, who was endeavoring to cause rotation. The result was slight, short, but frequently repeated epileptiform seizures, which lasted some time after the digital impression had disappeared, and were finally replaced by choreic movements. Now it seems hardly probable that the pressure of the finger produced a fracture of the bone.

Dugès[5] has given an instance of great depression in one of the parietal bones, not followed by any serious consequences. The child was delivered by the feet through a pelvis of which the conjugate was estimated at three inches and a quarter. Powerful traction upon the shoulders and upon the lower jaw was necessary to bring the head past the obstruction, and the parietal bone, which was in relation with the sacro vertebral angle, presented a depression half an inch in depth and two inches in breadth. The infant was resuscitated with difficulty, then had convulsions, but in a few days was quite well, and in fifteen days the depression had entirely disappeared.

Minor depressions or identations are sometimes seen, especially after the application of the forceps, and in rare instances such marks are permanent. But we must not be in haste to conclude that these indentations found upon the head of a newborn child are proofs of instrumental delivery, for Osiander[6] has stated that, having delivered a child by podalic version through a narrowed pelvis, he found upon its head a depression into which the end of a forceps-blade accurately fitted; so that he himself would have concluded, had he ever a similar depression, that the delivery had not been spontaneous, but by the forceps.

Fractures of the fœtal skull have been observed as the result of direct violence, as when a woman expels her child while she is standing, and it falls on the floor. Or, again, a woman,[7] near the close of the second stage of labor, the child's head being at the vulvar opening, threw herself out of the window, and several fractures of her limbs, as well as a fracture of the child's head resulted.

But apart from these cases in which the injury has resulted from direct violence, and those observed in delivery, whether spontaneous, manual, or instrumental, in narrowed pelvis, which will be referred to in a moment, fracture may occur when the labor is in all respects perfectly normal, so far as duration and facility are concerned. Thus, Dr. Charles West[8] has reported the case of an infant dying from convulsions nine days after birth, the labor having been an easy one and lasting but five hours; the mother had previously given birth to two living children, and these labors too had been normal. Yet upon an autopsy of the third child, a fracture of the right parietal bone, with effusion of blood between the cranium and dura mater, the effusion being more than half an inch thick and occupying the entire fossa of the bone, was discovered. He states in his report that fractures of the skull have been known to take place during easy labors, and wholly independent of any preternatural degree of ossification of the skull. Monteith[9] mentions having attended a case of perfectly natural labor, yet the child had a fracture of the right parietal bone; there was a marked depression in the middle of the bone, and the fracture extended to the sagittal suture on one side, and to the coronal on the other.

It is quite apparent that a case such as either of these might give rise to a medico-legal investigation, or to unjust censure of the obstetrician.

Coming now to fractures of the bones of the cranium or face, or rupture of joints involving the maxillary symphysis, or the cervical vertebræ, or fracture of a verterbra, for it is claimed that usually the body of one is broken rather than a separation between two vertebræ, as the consequence of great traction occurring in manual or in instrumental delivery, an important question arises as to the amount of force that may be safely used either with hand or instrument. In illustration of the great force which has been employed in forceps delivery without injury to mother or child, I quote the following from Dr. Peugnet.[10] He states:

"I was called to Mrs. K., a multipara, in labor with her third child. The first two were delivered by craniotomy. The vertex presenting, R. O. A., and impacted between the sacrum and the pubes, the conjugate diameter of the superior strait greatly contracted, I applied forceps, and had great difficulty in locking them. Dreading the laceration which might ensue in this case from side-to-side lever action, I concluded to rely upon direct and steady traction. My strength giving way, her husband held me round the waist, while the patient was held *in situ* on the dorsum by four women. In forty-five minutes I had the satisfaction of bringing the head down upon the perineum. The delivery was then speedily accomplished. Both mother and child, a girl, did well."

The least that can be said in regard to this case is, that the result was very remarkable, and it is doubtful whether the practice pursued could be repeated in any considerable series of similar cases without injury to both mother and child.

Delore,[11] after remarking that the fœtal head may endure without injury, a great compressing force if applied to a large surface, and if made by a regularly concave surface, as that of the blades of the forceps, states that from his experiments he found a compressing force of one hundred kilogrammes did not cause a fracture. But, on the other hand, if the blades slip, if the pressure is made upon a small surface, fracture follows the exercise of much less force. Further, a blunt, angular body, such as the sacro-vertebral angle, the spherical surface of which is described by a radius of two or three centimetres, produces a fracture with a force of twenty kilogrammes. As the

[4] British Medical Journal, October 18, 1873.
[5] Quoted by Jacquemier, Manual des Accouchements. Paris, 1846.
[6] Given by Cieślewicz, Verletzungen des Fœtus durch den Geburtshelfer. Halle, 1870. Cieślewicz gives forty cases of fracture, fissure, contusion of nerves, laceration of muscles, separation of epiphyses, etc., occurring in labor; he also reports two of rupture of the longitudinal sinus.
[7] Quoted by Delore, Fractures du Fœtus, Dictionnaire Encyclopédique des Sciences Médicales.
[8] Transactions of the London Medico-Chirurgical Society, 1845.
[9] London Lancet, November 14, 1874.
[10] Ohio Medical and Surgical Journal, 1878.
[11] Op. cit.

force which is exerted in difficult labor is more than twenty kilogrammes, fracture results.

Nevertheless, these results are not in complete accord with those of Goodell,[12] though, as will be seen, he is discussing the question of the amount of force of traction that may be safely used in a narrowed pelvis without injury to the neck of the child. Nevertheless, the subject of injury to the bones of the head is also involved, and in only one instance, I believe, does he mention fracture of one of the cranial bones. He states that he has on several occasions delivered living children after throwing on their necks a weight of 130 pounds. He further says that, although exerting all the manual strength at his command, he has never seen the body part from the head; he mentions one instance in which there was not the slightest apparent injury to the neck though the sacral side of the head had been broken in. Further, in another case, the force of traction upon the child's head, combined with suprapubic pressure, amounted to 200 pounds. Stone[13] has more recently reported a case of podalic version and delivery by traction through a narrowed inlet, in which he put on the neck of the child all the force of which he was capable, using the pump-handle movements described by Goodell. The child was dead. There was no fracture of the bones of the head.

"The spine had parted in the upper dorsal region during the traction upon the trunk, which was necessary to cause the shoulders to come low enough to reach the arms. The cervical spine was not broken."

Delore's conclusion as to the amount of force followed, in pelvic narrowing, by fracture of the cranium of the fœtus is erroneous, or such injury ought to have been observed in all cases where a force even approaching 100 pounds were used.

Champetier's[14] investigations as to the force that could be safely used in the delivery of the fœtus, led him to the following conclusions, the first of which does not correspond with the results obtained by Goodell; First, there is danger of fracturing one of the parietal bones, whatever the method of extraction, if the total force employed reaches thirty-five to forty kilogrammes, the infant being at term, twenty to twenty-two kilogrammes if it be premature. Second, the inferior maxillary of a child at term will bear, without rupture, a traction of twenty-five kilogrammes. Third, the vertebral column of an infant at term was ruptured in three cases by a force of fifty kilogrammes.

So far as objected that these results have been obtained by experiments upon dead children, and, therefore, they are not applicable to the force that may be exerted upon living ones, the answer of Matthews Duncan may be repeated. He, after consulting physiological and physical authorities, could say that a child living and one recently dead were the same as to tensile strength.

In this connection it is well to refer to the amount of traction which may be safely applied to the lower jaw of the fœtus, as stated by Duncan[15] from his own experiments. It will be observed that his results are not the same as those announced by Champetier. Duncan states:

"It is now ascertained that a force of half a hundred weight (fifty-six pounds) may, at least in some cases, be applied by dragging the lower jaw of the fœtus without producing any easily discovered injury of parts."

He further says, that compound dislocation would be almost certainly fatal, and in one of his experiments this injury was done by a weight of fifty-six pounds.

Not only does Duncan's statement as to the force which the inferior maxillary bear without injury differ from that of Champetier, but the difference is still greater from that given by Delore, who makes this forty kilogrammes.

Fractures of the cranium usually involve the parietal bones, but they may also occur in the frontal, in one of the temporals, or in the occipital. Jacquemier first pointed out the separation between the squamous and the basilar portion of the occipital bone, to which some more recent writers[16] have directed attention without giving him just credit. He has also stated that he has met with a fracture of the occipital in that part of the bone above the protuberance.

Ruge,[17] referring to separation of the epiphyses between the squamous portion of the occipital bone and the articular part, states that Schröder is the only one who has recently drawn attention to it, and, notwithstanding its importance in regard to the life of the child, this lesion is not referred to in classic works as one of the immediate consequences of extraction. The lesion may also occur in a narrowed pelvis, though the presentation be cranial. In these cases there may be not only effusion of blood, but further compression by the squamous portion having its anterior inferior margin forced against the medulla.

On the other hand, severe injury of the frontal bone has been observed without serious consequences. Thus, Dugès[18] saw a child recently delivered, and the left eye was almost completely outside the orbit, so great was the depression of the frontal bone, yet the infant did not have convulsions or any other grave symptoms.

I have, however, seen protrusion of the eyeball in a newborn, following fracture of the frontal bone by Hodge's forceps, used in a case of tedious labor in a primipara, the delay being from an occipito-sacral position; the child lived for a week after birth. That an infant may survive very grave injuries in labor is proved by a case reported by Lamotte,[19] in which a surgeon, in a case of shoulder presentation, had torn away the arm, and then performed craniotomy, evacuating a large amount of the cranial contents; yet the child was born alive.

[12] American Journal of Obstetrics, 1875.
[13] Medical and Surgical Reporter, February, 1880.
[14] Du passage de la tête fœtale a travers le détroit supérior rétréci du bassin.
[15] London Obstetrical Society's Transactions, vol. xx.
[16] Thus Bednar, Die Krankheiten der Neugeborenen und Säuglinge, Wien, 1863, refers to it as a hitherto unobserved injury.
[17] Bulletin de thérapeutique, from Zeitschrift für Geburtshülfe und Frauenkrankheiten, 1875.
[18] Jacquemier, op. cit.
[19] Traité des Accouchements, 1796.

Zweifel[20] regards fissures and fractures of the cranial bones as only of clinical significance if a sinus be injured and consequent hæmorrhage occurs. On the other hand, Delore[21] asserts that all these fractures are grave, on the ground that they may be accompanied by contusions of the brain. Further, there may be hæmorrhages between the bone and the periosteum, in the cavity of the arachnoid, or between the pia mater and the brain. If the solution of continuity be at the position of a sinus, there is frequently rupture of the vessel. He adds that in all cases in which the head has undergone severe compression from dystocia, he believes hæmorrhages occur. The significance of this last remark will be appreciated, especially when we consider the remote consequences upon the mental condition of the child, as urged more especially by some English observers.

Injuries to the bones of the face are usually of the inferior maxillary. This bone may be fractured, or separation of the mental symphysis may occur. Ruge mentions cases in which, in addition to injury of the bone, there were lesions of the soft parts—as, for example, tearing of the skin at the angle of the mouth, as well as the mucous membrane of the pharynx and rupture of the genioglossus.

Yet if we fail to use traction upon the lower jaw in cases of difficult head-last labors, we miss what may prove an important means of delivery in some cases, and which may be of great value when other means fail. Some years ago, in a case of narrowing of the pelvic inlet, having failed to deliver with forceps, I performed podalic version, and sought to deliver by traction, while a consultant aided with supra-pubic pressure. I am confident I did not use the force which some operators have safely employed under similar circumstances, yet the cervical vertebræ gave way, either by separation or by fracture, and I found apparently nothing but the integument holding the head to the body. I then succeeded by traction upon the inferior maxilla, supra-pubic pressure assisting, in bringing the head into the pelvic cavity.

That the head may be left in the uterus, the body being dragged away, is a fact proved by occasional instances in the history of obstetrics. In other cases the division has been made, not by rupture, but by cutting through the neck. An instance is reported[22] in which the obstetrician, failing to deliver the head in a case of shoulder presentation, after detaching the arm and bringing down the feet, performed decollation, and the head and the placenta remained in the uterus for forty days. Freund mentions a case in which the head was left in the uterus for ten years.

Probably the most remarkable case of multiple injuries to the face has been recorded by Petit.[23] The face presented, rupture of the uterus occurred, and the woman died undelivered, though the forceps had been used. The autopsy of the child showed multiple separations of the bones of the face, and fractures.

Paralysis of one of the facial nerves has been observed most frequently, but not exclusively, after the use of the forceps. In a paper read before the American Gynæcological Society in 1885, I have referred to eight cases of spontaneous facial hemiplegia, and also mention one case observed by Seeligmüller, in which the paralysis affected both sides of the face. But the disorder usually occurs from the use of the forceps, and is caused by the pressure of one of the blades at the stylo-mastoid foramen, or a little in front of the lobe of the ear. Landouzy, who has best described the affection, has remarked that in the infant the complete absence of the mastoid apophysis, and the slight development of the auditory canal, favor the possibility of this compression of the facial nerve near its point of emergence. In six weeks, according to Parrot and Troisier, recovery usually takes place in paralysis of the facial caused by forceps. Many cases, however, are well in ten days. Nevertheless, while recovery is the rule, it should be remembered that in some the injury is permanent. Duchenne[24] refers to two patients, one 15 years old, and the other 5½ years, in each of whom the paralysis continued.

It should also be observed that there may be facial paralysis in the newborn caused by protracted labor and intracranial hæmorrhage. Injuries of the sterno-cleido mastoid muscle have been observed by several. In reference to torticollis of obstetric origin, Stromeyer and Dieffenbach explained the affection as resulting from improper application of the forceps, the muscle being bruised or torn. Nevertheless, this explanation is rejected by Saint-Germain as not plausible. A very large proportion of infants that have wry-neck, are born with pelvic presentation, and it is asserted that in the traction exerted rupture of a greater or less number of the fibres of the muscles take place, and a hæmatoma follows; finally, the contractions of the cicatricial tissue result in drawing the head into its unnatural position. One of the first references to tumors of the sterno cleido-mastoid was made by Melchiori[25] in 1862. He spoke of them as indurations of muscle, sometimes met with in young infants, and to which he found no reference in authors. He met with the disorder four times, and he described the affection as an indurated, plastic deposit; while he mentions temporary deformity of the neck, he does not mention any case in which this was permanent. In referring to the etiology, he suggests that compression of the muscle or laceration of some of its fibres may take place during labor.

The next year both Dr. Wilks and Sir James Paget[26] met with cases of what they described as chronic induration of the sterno-cleido-mastoid. Another case of the affection was reported the same year by Harris, and thus the published cases in a few months were at least six, but no reference was made by any of the reporters to the previous observations of Melchiori.

Bryant,[27] in 1863, reported two cases of thickening of the sterno-cleido-mastoid. One patient was 4

[20] Lehrbuch der Geburtshülfe.
[21] Op. cit.
[22] Obstetric Gazette, from Archiv für Gynäkol., March, 1883.
[23] Annales de Gynécologie, 1874.
[24] See Nadaud, Des Paralysies Obstétricales des Nouveau-nès.
[25] Medical Times, London, vol. ii, August 9, 1862.
[26] London Lancet, vol. i, 1863, pp. 11, 236, and 313.
[27] London Medical Times.

the other 8 weeks old when he saw them; in each instance the birth was with pelvic presentation.

Probably in all the cases, or at least in a majority of them, the disease was hæmatoma. Nevertheless, Blachez[28] regards these tumors as caused by an interstitial myositis in consequence of traction upon the muscle. He describes the tumor, observed in one of his patients, as elastic, almost painless, and the size of a pigeon's-egg; it was situated in the right sterno-cleido-mastoid, and was not discovered until two or three weeks after birth, when the attention of the parents was called to it by the infant's keeping the head inclined to the right side.

Zweifel recognizes injuries of the sterno-mastoid muscle in labor as a cause of torticollis.

Professor Albert,[29] of Vienna, referring to a child with torticollis, stated that the sterno-cleido-mastoid may become contracted during intra uterine life, or be injured during birth. In breech presentations, and in difficult forceps delivery, a laceration of this muscle may occur, and be followed by inflammation and contraction.

While such injuries are more frequent after head-last labors, yet they are also met with in vertex presentations, and when the forceps has been applied.

On October 2, 1861, a paper was presented to the London Obstetrical Society by Dr. Tyler Smith for Dr. W. J. Little, the title being "Upon the Influence of Abnormal Parturition, Difficult Labors, Premature Birth, Asphyxia Neonatorum, on the Mental and Physical Condition of the Child, especially in relation to Deformities."[30] In this paper, which by the way mentions two cases of wry neck, that he attributed to difficult labors, the author says:

"It is impossible not to connect the persistent affections of the intellect, of volition, and of organic life, with the injury the several nervous centres suffered in some instances before the fœtus had reached the maternal pelvis, in others whilst in transit through it; and in a third set of cases, where the fœtus was exposed to neither of these kinds of injury, it suffered from asphyxia neonatorum, suspended animation, and its concomitant congestions, effusions, capillary apoplexies of the brain, medulla oblongata, and spinal cord."

Dr. Langdon Down, in discussing the obstetrical aspects of idiocy, stated that in a very large number of cases of idiocy the subjects were born after difficult labors, these being unusually tedious, and he held that if a neurotic tendency was present the tedious labor and suspended animation might determine the catastrophe, where otherwise all might have gone fairly well.

The following note from one of Dr. Little's[31] correspondents may be of some interest; it is in reference to a young man in regard to whom inquiry had been made by Dr. Little:

"I have again ascertained he was asphyxiated for two hours when born, and that he has always been a weak creature, very slow in mental development, with difficulty in speaking, trembling and shaky, unable to fix his attention on a book, and a bit of a punster." The final statement "a bit of a punster," is conclusive as to the intellectual feebleness of this unfortunate man.

These views are further strengthened by the statement of Dr. Arthur Mitchell[32] that he believes there is a connection between difficult labor and idiocy.

Injuries of the Trunk.—The chief lesions of the trunk are rupture of the connections between the dorsal vertebræ, or fracture of one of these, injuries to the abdominal wall by a badly directed blunt hook, effusion of blood in muscles, similar to those that have been referred to as occurring in the sterno-cleido-mastoid, retropleural hæmorrhages along the spinal column in case rupture of this column occurs, hæmorrhage into the abdominal or thoracic cavity, and collections of blood beneath the capsule of the liver, or of the kidneys, and rupture of the sacro-iliac joint. Ruge has collected forty-four cases of injuries to the fœtus occurring in extraction after version, and twenty-nine of injuries in pelvic presentations; in the former there are three of rupture of the sacro-iliac joint. It is probable, as suggested by Zweifel, that some cases of ankylosis affecting this joint, of which the etiology is obscure, are to be attributed to injury in birth.

Zillner[33] has reported a rupture of the sigmoid flexure occurring in labor.

Injuries of the Arms.—In connection with these lesions those of the scapula and clavicle, which belong to the arms rather than to the trunk, will be considered. Delore states that fractures of the humerus are more frequent than all others; since they are usually readily cured, and are generally caused by *maladresse*, they are rarely published. But he further says that this accident may occur in the hands of the most expert accoucheur if the pelvis be contracted. They most frequently occur in the disengagement of the arms after podalic version when extraction is necessary, and they may also happen in pelvic presentation, but usually, if we do not have to extract the child—that is, if the expulsion can be left solely to nature—the arms will not ascend, but remain applied to the chest. Smellie[34] states that he fractured the humerus in a case in which he turned and delivered by the feet, and this is the only one he gives, while he mentions three cases of fracture of the femur, two occurring in the practice of his assistants, and one in his own.

All obstetricians agree that in bringing down an ascended arm it is important no pressure be made until the internal angle of the elbow is reached, and that three or four fingers should be employed, and not one or two. Pajot regards it as important that the posterior arm should be liberated first. Küstner[35] describes separation of the epiphysis of the head of the humerus from the diaphysis as one of the injuries

[28] Gazette Hebdom., May 10, 1876.
[29] Obstetric Gazette, September, 1882.
[30] Obstet. Society's Transactions, vol. xviii,
[31] Obstetrical Transactions, vol. iii.
[32] Medical Times, 1860, 1863.
[33] Centralblatt für Gynakol., 1885.
[34] Sydenham Society's edition of Smellie's Midwifery, vol iii, pp. 296, 297. This great obstetrician, in the first volume, op. cit., remarks: "In laborious or preternatural cases, when considerable force hath been used in delivering the child, the whole body ought to be examined, and if there is any mark or contusion on the head it will disappear if anointed with pomatum, and gently rubbed off or chafed with the accoucheur's hand; if any limb is dislocated or broken, it ought to be reduced immediately; luxations, though they seldom happen, are more incident to the shoulder than to any other part, the humerus being easily dislocated, and as easily reduced. The bones of the arm and thigh are more subject to fracture than any other of the extremities; the first is easily cured, because the arm can be kept from being moved, but a fracture of the thigh-bone is a much more troublesome case, because, over and above the difficulty of keeping the bones in a proper situation, the part is often necessarily moved in cleansing the child."
[35] Ueber die Verletzungen der Extremitäten des Kindes.

of labor which may be overlooked, or falsely regarded as a luxation, fracture of the neck of the scapula, or injury to nerves. Fractures of the clavicle, separation from its sternal attachment, transverse fracture of the scapula, separation of the epiphysis of the neck of the scapula, injury of the acromion process, and dislocation of the humerus, have been observed.

Fracture of the clavicle is most frequently caused by pressing directly with one or two fingers in the endeavor to bring the head through the pelvic inlet after podalic version, or in pelvic presentation. McClintock, in one of his annotations to the Sydenham Society's edition of "Smellie," observes: "Although Smellie gives no example of fracture of the child's clavicle during delivery by the pelvic extremities, yet, in my experience, it is a bone very apt to be broken by the manipulations of the accoucheur, more so even than the humerus; this may, perhaps, be explained by its greater degree of ossification."

Paralysis of the Arm.—Sinkler recognizes hemiplegia as, in some cases, the consequence of injury at the time of birth, either from the forceps or from the pressure of a prolonged labor. Nadaud gives seven cases of paralysis of the arm attributed to the forceps; the first one of this injury reported is one of Smellie's. Jacquemier mentions an instance of paralysis of the deltoid following a long and difficult, but spontaneous, labor; the recovery was complete in fifteen or twenty days. He attributed the disorder to compression of the axillary nerve against the humerus at the point of its attachment to the deep face of the deltoid. Fasbender found a tumor, as large as a pigeon's-egg, situated above the right clavicle, in an infant soon after delivery; the hæmatoma gradually disappeared, but at first there was paralysis caused by nerve compression. Delore suggests that paralysis may be caused by the rupture of a nerve trunk near its connection with the spinal cord. He states that this accident is not rare in the newborn or in young infants as a consequence of traumatism; it is followed by incurable paralysis, which is compatible with life if an upper member only is affected.

Disengagement of the extended arms in pelvic deliveries, traction upon the axilla in delayed delivery of the body in vertex presentation, the traction in some cases being with the blunt hook, in others with the finger, have resulted in paralysis of the arm. So, too, the same disability has followed a case in which the arm has protruded in shoulder presentation, and delivery effected by podalic version.

Luxation of the humerus has, in some instances, been mistaken for obstetric paralysis. Further, it is important to distinguish between cerebral and traumatic paralysis. Duchenne[36] gives an instance in which there were both cerebral and obstetric paralysis, the latter consequent upon a fracture of the ulna near the elbow.

Fractures of the femur may be spontaneous, or consequent upon artificial delivery. Meyer[37] has recently reported two cases in which spontaneous fracture of the femur was observed; in one a single femur was broken, but in the other both femurs. In May, 1847, Dr. Vanderveer[38] reported a case of such fracture in childbirth.

But probably more fractures of the femur are to be attributed to the attempt to pull down a lower limb in pelvic presentation when the presenting part is already partially in the mother's pelvis, before pressing up that presenting part, or from the use of the blunt hook. Delore's experiments show that with the untired finger traction to the amount of fifteen kilogrammes may be made upon the groin, and this cannot break the femur. If a force of fifty-five kilogrammes is employed upon the femur, fracture occurs; if the instrument be perpendicular to the bone, the latter gives way with a pressure of twenty kilogrammes.

Again, the bone has been broken, or that which is equivalent, separation of the epiphyses been caused from traction upon the leg. A. R. Simpson mentions an instance in which, podalic version having been performed, the right lower limb brought down, and traction made; subsequent examination showed that there were three such fractures.[39]

Luxations of the femur consequent upon obstetric operations, according to Ruge, are exceedingly rare; upon 300 autopsies of newborn infants he did not find a single true dislocation of this bone.

Küstner, in referring to luxations of the hip, speaks as follows:

"Göschen relates a case in which Langenbeck reduced such luxation after the subject, a girl, was 13 years old, and mentions in this connection that Stromeyer had met with 20 cases. The only possible way in which this injury could occur would be by sudden and violent force drawing down the limb, and then dislocation upon the ilium might result. But the force must be great. I have suspended to the leg of a child, from six to ten minutes, a weight of from thirty to forty kilogrammes, without any injury to the joint."

Complete paraplegia in connection with facial paralysis of the right side has been observed following a difficult labor in which the forceps was used. Examples of rupture of the spinal cord, in connection with rupture of a vertebra, have been observed, and, of course, paralysis of the lower limbs. It is remarkable that in two such cases the children lived for some hours. Paraplegia in the newborn is, as Nadaud states, usually an evidence of serious lesion of the cerebro-spinal organs, and the child dies after a short time.

I think the study of these cases of obstetric injuries, which might be greatly extended—for much more remains unsaid than has been said—ought, in the first place, to lead us to a larger charity for fellow-practitioners, as many of the most serious injuries in childbirth may occur without the slightest blame necessarily attaching to the accoucheur.

Another lesson is that an important distinction should be made, as urged by Ruge, between podalic version and extraction, never resorting to the latter, unless absolutely necessary, after the performance of the former, and thereby many of the obstetric lesions of the fœtus may be avoided. Very wisely, Lamotte says, referring to the injuries that may be

[36] See Nadaud, op. cit.
[37] Archiv f. Gynäkol.
[38] New York Medical Journal.
[39] Edinburgh Medical Journal, 1880.

done in labor to the child by the accoucheur, "The hand improperly used is more dangerous than any instrument."

Again, the question arises as to the safest manual means for the delivery of the head in head last labors. In Ciéslewicz's collection of cases of injuries of the fœtus in labor, there are several in which very serious consequences resulted from employing the Prague method. One of these, reported by Gusserow, showed, upon post-mortem examination, rupture of the vertebræ and most of the soft parts of the neck so complete that the head was attached to the trunk only by the skin and the vertebral arteries. Ruge, rejecting both the Prague and the Vienna method, prefers elevation of the occiput, bringing the face down, and carefully conducted expression, as least liable to injure the fœtus.

Another question of practical interest, is the best method of delivery in pelvic presentations, when interference is necessary. Should we follow that employed by Goodell, in all cases bringing down a foot as soon as possible, and thus be commander of the situation, in case necessity for extraction arises? Must we use the blunt hook? Is the application of the forceps to the breech to be generally advised?

Again, while treatment of fractures of an upper limb, or of the clavicle, is said to present usually no great difficulty, can a similar statement be made as to fracture of the femur? What method of treatment is best?

In depressed fractures of the skull, is it not probable that some lives might be saved by the use of the trephine? and in other cases, not followed by death, perfect mental integrity insured?

Finally, many questions as to the diagnosis of obstetric paralysis of the newborn arise, and, also, as to when and what treatment should be employed.

DIPHTHERIA.

Read in the Section on Diseases of Children, at the Thirty-Eighth Annual Meeting of the American Medical Association, June, 1887.

BY H. LANDIS GETZ, M.D.,

OF MARSHALLTOWN, IOWA.

I am well aware that the subject I have selected is one which has been again and again discussed, sometimes by men who have evidently had experience with the disease, while at other times it is evident that the individual who has undertaken to discuss the disease had in reality only had experience with ulcerated tonsilitis, or what may be called "homeopathic diphtheria." It is not my purpose to take up your valuable time in the discussion in detail of the definitions, synonyms and history of the disease, but to consider such general conditions pertaining to symptoms, causes and treatment as I have formed opinions concerning, and which I believe are not fully set forth in all particulars, in even the various treatises upon the subject.

Let us admit the disease to be one of the zymotic class, specific, highly infectious, slightly contagious, the chief early symptoms of which are malaise of a few hours duration, with or without chills, followed by slight fever, which is indicated by slight increase of pulse and increased marking of temperature by the thermometer. There is seldom vomiting, and very seldom do we find convulsions at this stage of the disease.

The local symptoms, are at this stage of the disease, of so slight a character, so far as pain and inconvenience in deglutition are concerned, that unless the local lesion of false membrane formation is suspected, it would be readily overlooked, especially by the inexperienced. The early symptoms of diphtheria, are so mild in form in the majority of cases, that the real nature of the disease is readily overlooked, by physician, parent and patient. Any physician, who has had extensive experience with the disease, I believe, will bear me out in the statement, that time and time again, is found an extensive and well developed exudation upon the fauces and perhaps extending up over the arches of the palate and over the uvula, where the local inconvenience was so slight, that the parent did not even surmise the real nature of the trouble, sending for the physician simply because the child had not been feeling well, for twenty-four or thirty-six hours, and desired a physician to determine what the difficulty was. To be called twenty-four or more hours after membrane formation has set in, which I believe is always if sought for, found to exist quite as early as any *noticeable* degree of fever exists, is *late* to assume charge of a genuine type of diphtheria when attacking an individual whose system is in condition to furnish fertile soil.

The severity of the disease, as I shall endeavor to show in this paper, is not and cannot be usually discovered by the constitutional disturbances found to exist in the symptoms during the first thirty-six hours; in fact, the severity of the attack is seldom to be judged of by the constitutional symptoms so far as relates to febrile disturbances, being, in the majority of cases, only moderate in degree, frequently very slight, and only occasionally is very high temperature found with corresponding pulse. The severity of the attack being influenced by the soil in which it develops, and that *alone* determining it, and this in time proportionate with the fertility of the soil, as the varying systems would furnish for its development.

As an illustration let us admit that the disease may possibly develop with equal readiness in all tissues, all things equal, in all persons. The system, however, in some persons is in such a state, blood and other elements, as to afford but barren soil, while in others it is fertile; in the former the individual is proof against constitutional contamination, while in the latter the system becomes rapidly saturated, unless something is done, either to destroy the disease germs or to render the system proof against their inroads.

Two classes of remedies then are indicated: germicides and fortifiers. Germicides may be applied locally and termed direct, and constitutionally and termed indirect, the latter so altering the character of the blood that the germs, as soon as reaching it, perish.

Fortifiers constitute: 1. Such remedies as would, in the first place, by local application, protect or place in such condition, tissues of the fauces and others, as to prevent the lodgement and development of the disease. 2. The second class of *germicides* here apply. 3. The class of remedies, hygienic surroundings, food and elements which tend to improve and strengthen the quality of the blood and to bring the system into such a condition as will most nearly render barren the soil for the development of the disease.

Diphtheria is a disease which runs when terminating fatally, usually a rapid course, the majority of cases terminating in four to six days. Hence, whatever is done with a view to averting fatal results and controlling the disease, must be done promptly and thoroughly, it matters not whether the disease be first constitutional, or first local, or both. In this connection I quote the following extract from a paper contributed by myself over five years ago: "Concerning the seat of the disease there can be little doubt; nay, there can be no doubt in the minds of those who have had experience with it, that if it is not a constitutional disease at the outset, it very soon becomes such. And if the disease is communicable through drinking milk, etc., while micrococci may attach to the fauces and tonsils and thence originate the disease, it is quite as likely that some may be, and are carried into the stomach, and so on into the circulation. And in such an event it would be possible for the disease to be sometimes first constitutional and at others first local. In either event, if the disease germs are lodged any where in the system, local or otherwise, the constitutional and the local symptoms will soon be manifest, so that the treatment resolves itself into local and constitutional from the outset. At any rate this is the only safe mode to adopt. In some instances, if the disease were purely local (which I believe it may sometimes be), and we had some means by which we might to a certainty settle this point, we might then adopt a purely local treatment, perhaps with success, if the cases were recognized in their incipiency; but having no such means we must be alike prompt in local and constitutional treatment, if we would save our patient, for delay in either is almost certain death." (Concerning the seat of the disease, there can be little doubt.)

As to what constitutes promptness and thoroughness is explained in the further quotation from the same paper:

"If you begin treatment within twelve hours from the commencement of membrane formation, there should be no fatal results. If you begin treatment eighteen to twenty hours after the commencement of membrane formation, you may expect to lose a patient occasionally. If you begin treatment twenty-four hours after the commencement of membrane formation, you may, in spite of all you can do, expect a great many fatal results."

Now I imagine I hear many saying: "it is not diphtheria he is discussing;" but it is. I imagine I hear others saying: "if the disease is of malignant type, it matters little *what* or *when* you do for the patient, few, if any, cases will recover." Here arises the query, are not all germs which produce the disease alike, admitting there may be occasionally an imperfect one? And is it not more particularly the soil in which the germs lodge, than that it is, there is a simple and a malignant type of the germs, malignity depending upon, or being due to *quantity* and *not quality* of germs? In the prevention of development of quantity, is the secret of success, in treatment, in the majority of cases of diphtheria, especially the class of cases that would and do suffer from blood contamination, not due to immediate or partial, laryngeal stenosis, resulting in immediate or gradual asphyxia, due to retention of carbonic acid in the blood, but due to overwhelming quantities of the disease germs. If there is any virtue in treatment of the disease by medicine or otherwise, the importance, therefore, of early care is readily understood.

Having seen that the disease under consideration is one which is likely, owing to its mild symptoms to mislead even the careful observer, it becomes then the duty of the physician to not only examine carefully the throat of every adult whom he may be called to see, when the same has been exposed to diphtheria, even if no local inconvenience is complained of, but also to examine carefully the throat of any child who complains (whether diphtheria is known to exist in the locality or not) of slight inconvenience in swallowing or an uncomfortable feeling in the throat. It is further, the duty of the physician, to advise persons who have children, to examine carefully the throats of those who may complain or seem ill in the least, when diphtheria exists in the locality, and also to send for a competent physician if anything resembling membrane is discovered. If they have any concern for the safety of the child, they had better send a hundred times uselessly, than to delay once, a dozen hours too long.

In the throat difficulties, the result of contracting a cold, especially tonsilitis of an acute nature, whether a simple or ulcerated case, the local symptoms in the way of pain are always such as will command attention at the outset of the disease; the degree of fever existing also is such as would, in the majority of instances, cause the inexperienced physician to have much concern for the welfare of the patient. These conditions are worthy of note in the differential diagnosis of diphtheria and acute tonsilitis, the result of cold. In the former, the local inconvenience and the general or systemic disturbances are not in degree at all in keeping with the dangerous character of the disease. The tendency of the disease, being toward a rapid fatality when not treated, and often so when not treated timely and efficiently, while in the latter, the local inconvenience and general symptoms are in severity altogether out of keeping with the slight dangers of the disease, the tendency being even without treatment toward recovery.

Is membranous croup and croupal diphtheria, (not diphtheritic croup, because there is no such disease,) one and the same disease? Difference of opinion still exists in regard to these two diseases, or as some

believe, in this *one* disease. Properly there is no such disease as diphtheritic croup, but it is diphtheria of a croupal type inasmuch as it involves with an inflammatory condition and an exudation, the larynx, the same organ affected as is the case in simple or spasmodic croup, and yet the germ or cause of diphtheria and the cause of spasmodic laryngitis, differ more widely than day and night. In spite of this the nomenclature is simple laryngitis, membranous laryngitis and diphtheritic laryngitis; the former two are correct, but there is no such disease as the latter would indicate, the *disease* not being indicated by the *part* affected but the *type* of the disease being indicated by the part affected; hence, what is commonly called diphtheritic croup should be called and is intended to mean, croupal or laryngeal diphtheria. Believing that membranous laryngitis is a separate and distinct disease from laryngeal, or any other form of diphtheria, I will refer briefly to a few differential symptoms or conditions. In simple or spasmodic laryngitis the attack is sudden, no exudation, with or without severe fever, first paroxysms most severe, attack much abated in twenty four hours. In membranous laryngitis, attack sudden, similar to that of simple laryngitis, laryngeal symptoms, after first paroxysm becomes more severe, paroxysms become more frequent and a constantly increasing dyspnœa exists, pulse and temperature also gradually become higher, there is never any exudation upon the pharynx or tonsils, and there never exists the odor so characteristic of diphtheria, whether it be of laryngeal, pharyngeal, or nasal variety. The symptoms of a fatal case are gradual asphyxia, with exudation in the finer bronchial tubes and exhaustion from prolonged high temperature, the result of acute inflammatory conditions of prolonged duration, having continued a week or more. No signs of systemic contamination, the patient dies exhausted.

In croupal diphtheria the patient is indisposed, a general malaise existing for a matter of twenty-four hours; he becomes gradually hoarse and respiration becomes more and more difficult. There is a striking absence in the frequency of the spasmodic coughs so common in laryngitis, of either variety. The temperature and pulse are not, as a rule, higher than in the ordinary types of diphtheria. The breath is characteristically offensive; there are always found patches of exudation upon the tonsils or pharynx, usually of a button-like form; the patient sinks rapidly, usually perishes in from four to six days, not from asphyxia, but from blood-poisoning, with all the symptoms so characteristic of the laryngeal type of diphtheria. I give below an extract from a letter recently furnished by myself, relative to an outbreak of diphtheria in our city during the year 1886, which may be of some interest in connection with this paper.

There were reported during the year 1886 ninety-one cases of diphtheria. In some instances, through misunderstanding ~~or neglect,~~ reports were made of the existence of the disease but once in the same family, although cases subsequent to the first one occurred, and in this manner it is probable that some of the cases reported as diphtheria were cases only of ulcerated tonsillitis. It is safe, however, to estimate that there occurred during 1886, something like 100 cases of diphtheria. There were reported deaths caused by diphtheria during 1886, 41, as follows:

January—1 male, æt. 4 years.
February—1 male, æt. 1 year.
March—1 female, æt. 7 years.
July—1 female, æt. 3 years.
August—Males, 3, æt. 1, 1 and 10 years; 1 female, æt. 6 years.
September—Males, 4, æt. 7, 7, 8 and 10 years; 3 females, æt. 10 months, 2 and 2 years.
October—Males, 7, æt. 1, 2, 2, 3, 5, 8 and 9 years; females, 6, æt. 1, 3, 3, 3, 6 and 6 years.
November—Males, 2, æt. 3 and 12 years; females, 5, æt. 8 months, 2, 4, 4 and 4 years.
December—Males, 2, æt. 3 and 5 years; females, 4, æt. 1, 2, 7 and 9 years. Total—Males, 20; females, 21.

Average age of males, about 5 years and 2 months; average age of females, about 3 years and 8 months; the difference in the age as between male and female being about 1 year and 8 months. Males the oldest. It will be seen by table, that of those who died only about one-third, or 33⅓ per cent., were school-children. It will be further seen by table that the disease increased in August, and reached its maximum in October, and diminished in November and December in about the same ratio as it increased in August and September. Various questions suggest themselves as regards the abatement of the disease, among them: Did we find an obstructed sewer? Did we find an impure water-supply? Did we close our public schools? No, we found nothing, changed nothing, and did not close our schools. The disease seemed to come with the winds and vanished with them. Had we made notable changes in water-supply, or sewage, or closed our schools at a moment when the disease was at a maximum, and the abatement then occurred which *did* occur from unknown causes, all interested would have been unanimous in declaring that the cause of the disease in this locality had been found and removed. During a given week in October occurred the greatest number of cases and the largest fatality, and during the week following, there were reported only a few cases. So striking was this, I remember remarking to a member of the School Board: "If you had closed the schools last week with a view of breaking up the diphtheria, and not yet reopened (a week later), all the city would have been unanimous in declaring that you had done just the right thing to arrest the disease."

For a time it seemed the cause of the disease existed in well water, all cases occurring in families who used well water. When, however, cases occurred in families who were using river water, this idea was promptly abandoned. What caused the disease and what abated it are questions of interest. We understand that the disease is, when once developed, ~~easily communicated to other individuals~~ by direct contact, mainly through respiratory passages, but inasmuch as our schools were not closed, this possible (not probable) source of communication was not and is not now removed.

Our hygienic surroundings, water, sewage, etc., except as affected by frost, remain the same, and yet the disease has substantially vanished from our midst. What, then, has caused diphtheria among us? Diphtheria is classed as among the diseases due to faulty hygienic surroundings or filth. My own explanation of the matter is that in filth exists and may be found a factor in the development of diphtheria, but that, in order to develop the disease from these sources, there must exist certain atmospheric influences which, coupled with tangible impurities, develop the disease, but that the disease *is not* and cannot be developed by either of these factors alone.

Admitting the nature of the disease to be of rapid course, requiring to be met promptly with remedies which will destroy germs and remedies which will support and sustain the system, the question remains, what remedies are best adapted to accomplish the desired results? In the way of drugs proper, two remedies above all others: quinine and tinc. chlor. of iron. I am well aware that these are not new remedies, and I am equally well aware that the profession have not, at least until recently, attached to these remedies the importance which they merit. It is generally admitted and unquestionably demonstrated that quinine is a specific in the destruction of malarial germs, and if I have seen the good effects of quinine in malarial disease I have seen equally good effects in diphtheria, and believe that when it has failed it was under circumstances where the system had already become so overwhelmed with the disease that *no* remedy could be properly carried into it, or that it was not properly administered. It should be remembered that, in treating malarial disease, it will recur and wait for the remedy a matter of weeks, and then yield promptly. This is not the case in diphtheria. The patient must have full doses; an adult, the first dose 15 or 20 grains, subsequently 10 grains every 6 hours during the first 36 or 48 hours; after this the dose should be such as will continue a slight ringing in the ears. Care should be taken to guard against overdosing with quinine in diphtheria, since in large and continuous doses it probably acts as a depressment upon the nerve centres; the disease itself having the same tendency, it is important to be cautious at least. The effect of quinine would be in the first place as a direct germicide, and in the next place under the class of fortifiers, so altering the character of the blood as to make it proof against the inroads of diphtheria germs. It may also be considered a fortifier on account of its general tonic properties such as are obtained when given in small doses.

Tinc. of chlor. of iron may be used locally as a direct germicide and constitutionally as a fortifier by preserving the purity of the blood and nutrient qualities; possibly also having germicidal effect through the blood. How shall it be used? As a local application, in varying strength; from 1 part of iron to 3 of glycerin and so on to full strength, as the case in the judgment of the physician requires. Applications should be made twice or three times in twenty four hours by the physician (*never* entrusted, if it can be possibly avoided, to parent or nurse), because they never will even *half* do the work, failing partly from sympathy and partly for want of experience. Twenty drops of the muriated tincture should be given an adult in a teaspoonful of water every two hours so long as the stomach will bear it; if the stomach becomes irritable then the interval must be lengthened. It is not amiss to call attention here to the fact that chlorides of various kinds have been and are recommended in the treatment of this disease. Their virtue, if any they possess, is probably due to direct germicidal properties, and also the second class of fortifiers. As a solvent of membrane, fumes of slacking lime are among the most valuable applications, whether the attack be one of laryngeal or other type. Hot applications I believe to be always injurious, predisposing to the more rapid development of the disease germs. Ice may be taken frequently in the mouth and allowed to dissolve, when desired by the patient. Stimulants must be given in full doses, whiskey, brandy, or wine, as may be indicated or as the patient may prefer, at the approach of symptoms of prostration. Many other remedies might here be discussed, suffice it to say, that all remedies having properties and qualities identical with the properties of the remedies here recommended may be substituted, and that *all* remedies which have a depressing effect upon the system should be cautiously administered, and no physician should trifle with this disease. This feature in the treatment of diphtheria should be ever remembered by the physician, that to insure success, in all cases, you must insist that medicines, stimulants and food be given on the hour, night and day, and that all local applications should be made by the physician, and not entrusted to parent or nurse.

To show the importance of this thoroughness and the necessity of promptness in treatment, I will cite the circumstances connected with the occurrence of the disease in a family of ten persons, father, mother, four children between the ages of 6 and 12 years, and four children (three sons and one daughter), between the ages of 17 and 25. All but the father contracted the disease. I was called in consultation when all had contracted the disease. The mother, adult daughter and two adult sons had already died, and one other son was in a dying condition (all happening within a period of two weeks); the children under 12, four in number, all recovered. The treatment adopted was the same for children and adults. Why did the adults die and the children recover? Because the adults refused to have any treatment until the disease had far advanced, and the children were forced to treatment early.

204 E. Main St., Marshalltown, Ia.

HYDATIDIFORM MOLE.

Read before the Medical Society of the District of Columbia, September 23, 1887.

BY THOMAS C. SMITH, M.D.,
OF WASHINGTON, D. C.

Hydatidiform degeneration of the chorionic villi is an unusual disease, but it is not so rarely met with

as might be inferred from the experience of Madame Boivin, who "saw but on case in 20,375 deliveries." (Parvin.) I have met with two cases, that I think are sufficiently interesting to place on record. The second in chronological order will be first narrated, and is as follows:

Mrs. F., white, nearly 20 years of age, was married April 11, 1887, menstruated April 17, and again May 17. In June the menses failed to appear and the usual symptoms of pregnancy shortly supervened. Nausea and vomiting were almost incessant up to the time of my first visit, Sept. 15, 1887. The mammary glands had, also, increased in size, and the pigmentation of the areola was well marked. Early in the morning of Sept. 15, the lady was taken with pain and hæmorrhage, and when I arrived at her house she was flooding profusely. Examination revealed the uterus enlarged and reaching to the umbilicus, and quite hard to the palpating hand. On making a vaginal examination the os was found to be closed, but the blood was flowing freely. Believing miscarriage to be impending, and from the quantity of blood lost, not to be prevented, the vagina was tamponed, and the patient given ergot and opium. The patient believed herself to be four months pregnant, while the size of the uterus indicated that she was at least six months advanced in gestation. Four hours later the condition of the patient was practically unchanged. She was still flowing freely and the pulse was quick and weak. The tampon was removed and the cervix still found undilated. The vagina was again packed with absorbent cotton, and the same medicine continued. In the evening there had been no flow and the patient expressed herself as being comfortable. At 11 o'clock at night I was again sent for and found the patient in great pain and losing some blood. The tampon was removed and the os found to be open and dilatable, so that the index finger was readily passed into the uterus where it encountered a mass which felt like an aggregation of dense cobwebs. Owing to the sensitiveness of the abdomen, the patient could not tolerate sufficient pressure to enable me to force the uterus down far enough for the finger to clear out the contained mass, and it became necessary to administer ether, after which the hand was passed into the vagina, and the finger in the uterus broke down the diseased tissue, and on removing the hand the uterus promptly contracted and extruded such of the growth as had been detached. It was necessary to introduce the hand several times, and then I had the satisfaction of finding the womb entirely empty. The hæmorrhage ceased, but ergot was given to secure firm contraction. The lady has completely recovered except from the anæmia which ensued on the loss of blood.

It may be stated here that at no time during the pregnancy was there any bloody or watery discharge from the vagina previous to my visit.

The quantity of currant- and grape-like bodies removed from this lady was about a quart. Many were detached singly, while others were in clusters and adhering to the parent tissue.

The other case that came under my treatment was that of a lady who had borne two children, and who believed herself to be again pregnant. When I was first called she was having some flow of blood from the vagina, but as the os was not dilated I endeavored by rest and suitable treatment to prevent what appeared to be an attempt to miscarry. This effort proved effective at the time, but hæmorrhage recurred during the following six weeks and finally, on finding the cervix dilatable, the hand was passed into the uterus and not less than a half-gallon of hydatidiform bodies removed. The anæmia in this case was very great, but the lady entirely recovered. I have since delivered her of two children. This case occurred over six years ago and is reported from memory, but in conversation with the patient a few days ago she verified the history given above.

The cystic bodies from the last mentioned case were generally much larger than those presented this evening.

I have found the study of the disease under consideration a very interesting one, and will give a brief summary of the points worth noting.

It is now universally conceded that the affection is due to a proliferative degeneration of the villi of the chorion. Formerly no distinction was made between the true hydatid and the cysts found in the disease under discussion. To Cruveilhier is due, I believe, the credit of demonstrating the difference between the conditions.

The time at which the chorionic degeneration commences and the exciting causes are questions of interest. The weight of opinion, however, is that the disease necessarily begins within the first three months of gestation. Thomas sufficiently elucidates the matter when he says: "It is probable that after the end of the third month no such degeneration can occur in the secundines—for after that period the placenta is formed, the villi which existed at its site become vascular, and those over other parts of the surface of the fœtal sac undergo atrophy. It is true that at the period of parturition, masses of these sacs have, in rare instances, been expelled, but in such cases it is probable that some portion of the chorion had begun to degenerate at an early period of conception." Dr. Graily Hewitt dissents from the generally accepted opinion that the starting point of the disease is disease of the chorion, and endeavors to show that the degeneration is the result of the death of the embryo, but this view is apparently refuted by the fact that the disease may continue until the completion of gestation and the birth of the living child. But the fact that in twin pregnancy one fœtus may be carried to term, while the chorion of the other may degenerate and be cast off at the time of parturition, or later, lends plausibility to the explanation given by Hewitt.

And the fact that moles may be retained for an indefinite period, is an important and far-reaching one, and the necessity of admitting and recognizing it has been seriously insisted upon, as the character of women may be assailed unless that is done. Thus a woman may cast off a hydatid mole long after the death of her husband; or a child may be born at term and months afterward a mole may be discharged.

If this should happen during the absence of a husband the character of a wife might be smirched. More than one authority has directed attention to this matter.

Disease of the endometrium, it has been claimed, may be a cause of hydatid degeneration of the chorion, but it is only mentioned to direct attention to the subject.

The query has been propounded, whether a portion of placenta retained at the full term can take on hydatidiform change? Some have answered in the affirmative, (Montgomery and Ramsbotham) but all recent writers dispute this conclusion.

Another interesting fact is that the degeneration of the chorion may occur in successive pregnancies. Tait instances the case of a woman who had this occur five times, and who at the time he wrote was again pregnant, but without showing signs of the disease.

Concerning the symptoms of hydatidiform degeneration of the chorion, it may be said that there are but few that are characteristic of the disease. Rapid development of the uterus is the sign most generally present, but the patient is generally too ignorant of the subject to consider the meaning of the enlargement, and the physician, when called to the case, is so prone to believe that the woman has made a mistake in her reckoning, or is deceiving him to cover up her misdoings, that he pays little attention to it until the degenerated mass has been expelled. Still, this is an important symptom, for it is conceded by all that the uterus is enlarged far beyond the size it should have attained if the period of gestation is correctly given by the woman. In my patient the enlarged uterus reached the umbilicus, but according to her story she could not have been quite four months pregnant when the diseased mass was thrown off. Attacks of hæmorrhage, or of bloody and watery discharges recurring at intervals, are relied on for aid in diagnosis. One of my patients had this symptom, the other not. Expulsion of vesicles would be characteristic if they were found on examination, but the symptom is too often absent. Other signs are irregularity in the shape of the uterus; absence of fœtal heart sounds and of fœtal movements; enlargement of mammary glands but no pigmentation of the areola, according to Bedford, but there *was* pigmentation in my case, and in my opinion it ought to be found for the pre-existence of pregnancy is a *sine qua non* to the development of the diseased state under discussion. Meigs says, "Intense constitutional irritation accompanies hydatid pregnancy in those examples of it where the growth is violently rapid."

The symptoms then to be relied upon, according to Depaul, are 1. Rapid development of the uterus. 2. Attacks of hæmorrhage. 3. Expulsion of vesicles.

The prognosis is usually favorable, but exceptionally the proliferating bodies develop so as to enter the uterine sinuses, thereby producing great thinning of the walls of the womb which favors rupture of the uterus and discharge of its contents into the peritoneal cavity. Tyler Smith once saw a case in which the uterus had been ruptured by the violence of its contractions in expelling a hydatid mole. But the greatest danger is from hæmorrhage and its sequalæ —shock and anæmia. Lusk reports a case of death in a patient of his from this cause.

The *treatment* of these cases will be mainly applicable to miscarriage. If the hæmorrhage is slight and the os uteri closed, rest and opium will meet the indication. For severe hæmorrhage, use the tampon until the uterus dilates or is dilated by any suitable method, and remove the offending material with the finger. The hand should be introduced into the vagina to facilitate the emptying of the uterus, after the patient has been etherized.

MEDICAL PROGRESS.

SURGICAL TUBERCULOSIS. —(See the preceding numbers of THE JOURNAL.) 24. In regard to the treatment of tuberculous affections of joints, I believe that parenchymatous injections with a Pravaz's syringe (of tincture of iodine, carbolic acid, sublimate, arsenic, etc.) have thus far given no results worth mentioning. Puncture of the joint with a large trocar (an abdominal trocar), and subsequent washing out with disinfecting and other solutions, is effective only in exceptional cases (Hydrops tuberculosus, etc.). In regard to operative procedures, the following are to be considered:

a. Incision (and where possible double incision) *and drainage*, with or without scraping out the joint with the sharp spoon (Arthrotomy).

b. Total extirpation of the capsule of the joint, making a large incision as when opening the joint for resection, leaving the bony epiphyses and articular cartilages (Arthrectomy or arthrectomia synovialis).

c. Resection of the joint, with simultaneous extirpation of the capsule of the joint, but always leaving the healthy parts of the bones, and often making only partial or at least atypical resections (Arthrectomia ossalis et synovialis).

The former operation of leaving the gravely diseased "fungous" capsule of the joint, and simply decapitating the articular end of the femur and humerus, without complete and thorough cleansing out of the socket, should be abandoned.

As to the use of the sharp spoon, it should be remembered that with it those inter-muscular, periarticular, and subcutaneous abscesses communicating with the diseased joint or osseous foci, and which are lined with a characteristic and easily detached membrane, can be completely cleansed of all tuberculous granulations; furthermore, the sharp spoon proves sufficient in the case of bone, as we can scrape out the most diseased tissue, down to the healthy spongiosa; but this is impossible with a tuberculous-degenerated synovial membrane. An abscess membrane, easily detached from healthy tissue, does not exist in this case, and the tuberculous granulations here infiltrate the fibrous layers of the capsule. Thus it is that after the use of the sharp spoon recurrences easily exist, when the synovialis was severely affected. In using the sharp spoon the

operation should be bloodless and done with large incisions, which permit a complete view of the field of operation; then follow the operation with careful antiseptic disinfection and after-treatment.

25. Tuberculosis of bones without affection of the large joints is represented clinically by the following forms of disease:

a. Spina ventosa (Pädarthrocace) ampullaceous thickenings of the phalanges of the fingers and toes, sometimes of the metacarpal and metatarsal bones, exceptionally of the ulna and radius, or even of the tibia and fermur usually multiple, and depending on a tuberculous osteomyelitis. The affections is seen only in children, in their early years, and gets so completely well, in spite of its multiplicity, often without breaking, suppuration or the formation of sequestra, that no deviation in the shape or growth of the affected bone remains afterwards.

b. Tuberculous suppuration and necrosis of the orbital portion of the superior maxilla, with the subsequent characteristic ectropion of the lower lids, also affecting young children by preference.

c. Cold (tuberculous) abscesses of the skull, developing from small tuberculous necrosis of the skull, and generally penetrating into the cavity of the skull. Most in grown people.

d. Tuberculous caries of the ribs.

e. The common form of spondylitis (Pott's hump). This affection, contrary to the traditions of the textbooks, should be classed with tuberculous joint inflammations, as here, after the early destruction of one or more intervertebral cartilages, the same unfavorable factors come into play as in the joints, the mobility of the separate segments against one another, the weight of the body, the progressive destruction of the inflamed parts of bone pressing against one another, and the mutual infection of the same. It is to be remembered that tuberculosis of the bones in grown people almost never affects the shaft of the long bones, and therefore ostitis and periostitis developing here must generally be attributed to other causes (syphilis, chronic form of infectious osteomyelitis).

26. Even the largest abscesses, originating from tuberculous bones and joints, may be freely incised without danger, provided this be done under strictest antiseptic precautions, and the after-treatment be strictly antiseptic. *Early opening of these abscesses is desirable.—Langenbeck's Archiv.*, Bd. 33, Hft. 1.

Fluid Extract of Pichi in Vesical Catarrh.—Dr. H. S. Delamere, of Lubec, Me., referring to the use of pichi in the treatment of catarrh of the bladder, relates the following case:

"A. B., æt. 28, had been suffering for two years from vesical catarrh. He had had gonorrhœa, but a No. 21 (French) bougie passed without difficulty, causing, however, considerable vesical tenesmus. When I was called to see him he was passing urine every hour during the day and four or five times during the night. The urine was alkaline, ropy, ammoniacal, and the microscope revealed pus. I gave the usual remedies prescribed in country practice, such as buchu, uva ursi, etc., but without benefit. I then resorted to washing out the bladder by means of the double-channel catheter, with the effect of relieving my patient slightly. The least exposure, however, aggravated the symptoms and caused as much suffering as ever. After about a year and a half of constant treatment, with no other result than to keep the disease at bay, I received a sample bottle of fluid extract of pichi, which I tried. After the patient had taken it a few days he expressed himself as feeling better. He was now getting up twice during the night. But the sample was gone, and I was obliged to wait until I could get a fresh supply. In the meantime the patient grew worse; had to get up three or four times during the night. As soon as the drug arrived I commenced giving him 20 drops four times a day, which dose I increased to 30 drops. In a few weeks my patient was so much better that I abandoned washing out the bladder, and to-day he is at work. The urine is clear, free from mucus and has no ammoniacal odor. He sleeps well, and does not have to get up more than once during the night. Notwithstanding he has suffered recently from a severe cold, the bladder trouble has not returned. The man's general appearance is healthy, appetite good, and he seems well.—*The Medical Record*, November 12, 1887.

Antidotes to Strychnine, Resorcine and Picrotoxine.—Professor Anrep[1] has proven experimentally that urethane possesses properties antagonistic to the convulsive drugs, such as strychnine, etc., and believes that urethane may be employed in cases of poisoning by these substances. It is superior for these purposes to hydrate of chloral; it is less dangerous, and may be administered in large doses with perfect safety. The author concludes that, in the case of man, it is necessary to administer it in doses of 4 to 6 grams as an antidote to the poisons above mentioned.

E. Koch[2] states that butychloral hydrate is useless as an antidote in cases of strychnine-poisoning; in picrotoxine-poisoning, it fails to overcome three times the minimum fatal dose, behaving in this respect like chloral hydrate. Picrotoxine may be successfully used as an antidote to the narcotic effects of butychloral hydrate and chloral hydrate. According to A. Bockal[3] paraldehyde is a powerful antidote to strychnine. Ten times the fatal dose of strychnine may be safely administered to dogs that have previously received paraldehyde. Strychnine is not, however, an antidote to paraldehyde.—*Boston Med. and Surg. Journal*, November 10, 1887.

The Ptyalism of Pregnancy.—Dr. Justus Schramm, of Dresden, describes in the *Berliner Klinische Wochenschrift* the case of a woman, æt. 24, subject for a year and a half to debility, emaciation, and a feeling of pressure in the region of the stomach. She was highly emaciated and very anæmic, with red, swollen gums. There was also free salivation, two pints of saliva being collected in

[1] Journal de Pharmacie et de Chimie, May, 1887, p. 505.
[2] Chemisches Centralblatt, 1886, p. 811.
[3] Ibid, 1886, p. 622.

twenty-four hours. Chronic mercurialism was suspected, and iodide of potassium was accordingly prescribed, with but trifling benefit. Atropine was then given, with like unsatisfactory results. After nine weeks' treatment, it was found that she was at about the sixth month of pregnancy. The sympathetic was galvanized. The daily secretion had fallen to about 1¼ pint. Pilocarpin injections were also tried; the subjective troubles were then relieved, but the secretion of saliva remained the same. Lastly, Dr. Schramm administered to the patient three times daily a 1 in 25 aqueous solution of bromide of potassium. Henceforth there was steady improvement; the flow of saliva gradually ceased. Labor was natural. The progressive emaciation in this case might at first appear due to the great drain of organic and inorganic material from the system, but the solid constituents of the saliva were markedly scanty, and the loss of water could be readily compensated. Dr. Schramm found that, above all, ptyalin was absent from the saliva, the abnormal composition of which rendered it useless for the discharge of its important digestive functions.—*British Medical Journal*, November 5, 1887.

COLCHICUM IN GOUT.—Whether colchicum should or should not be administered is often a question of debate. DR. CARTER, of Birmingham, gives his own conclusions in the current number of the *Birmingham Medical Review*. He believes that this drug should be avoided in all cases attended with debility and cardiac feebleness, and that its use should be limited to early attacks of a sthenic type, and when the pulse is one of high tension. From the liability of colchicum to depress the system and to interfere with renal elimination, its administration should not be continued for a longer period than is absolutely necessary for the relief of pain. In order to prevent the employment of a larger quantity than is necessary for this purpose, it is desirable to give the drug in moderate doses, repeated at short intervals, rather than in a large single dose. He argues that there is no evidence of the curative influence of colchicum, and thinks, with many others, that, in spite of the relief afforded, it tends to favor recurrence, and that it is safer to avoid its use altogether if this is possible. We are disposed to admit the general soundness of these views; but the evidence in favor of colchicum promoting the development of gout is not entirely satisfactory. Dr. Carter's observations on colchicum as a vascular depressant are rational, and he has found that such dilators of arterioles as nitrite of amyl, nitro-glycerin and nitrite of sodium are scarcely inferior to colchicum in affording relief to gouty inflammations. Veratria, a powerful vascular depressant, is a principal constituent in a well-known nostrum for gout. Besides filling the cutaneous arterioles and swelling the skin, which actively perspires, with lowering of the general blood-pressure, colchicum diminishes the function of the sensory nerves, and may in this way tend to relieve pain; the sweating may also aid elimination, and relieve the kidneys from some of their work.—*The Lancet*, October 29, 1887.

CYANOSIS CAUSED BY ANTIFEBRIN.—Among the points pertaining to the physiological action of antifebrin BONAI discusses this. He concludes that the cyanosis which is produced in rabbits by fatal doses results from a disturbance of circulation; that in part it is due to the paralyzing action of the antifebrin upon the motor nerve endings in the muscles, and in part to a similar effect upon the respiratory centres in the medulla. He does not think that it depends upon the formation of methæmoglobin, since this substance cannot he found in the blood of the rabbit. In dogs similarly poisoned it can be found and in part, undoubtedly, is accountable for the cyanosis in them. Upon the brain antifebrin does not seem to act, although it does have a paralyzing influence upon the sensitive elements of the spinal cord. Bonai accounts for the antipyretic effects of the substance by its power of lessening the production of heat; and to this the presence of methæmoglobin contributes, since a part of the blood is no longer capable of taking up oxygen or transporting it.—*Centralblatt für klin. Med.*, 1887, No. 43.

TREATMENT OF THE THIRD STAGE OF LABOR.—FREUND, of Strassburg, gives his conclusions regarding this subject as follows: In normal cases a judicious combination of the expectant and active method in treating the placenta and membranes is best. In removing the placenta the accoucheur should wait until the first signs of spontaneous expulsion appear. In cases where the placenta must be removed at once Credé's method of expulsion is the best. Freund has observed, in normal cases, that the uterus rises toward the umbilicus when it expels the child. He imitates, with one or both hands, this action in securing the expulsion of the placenta by gently pushing the uterus upward, and at the same time compressing it.—*Deutsche medicinische Wochenschrift*, October 27, 1887.

INFLUENCE OF POTASSIUM IODIDE UPON THE ELIMINATION OF MERCURY.—According to DR. SOUCHOW the elimination of mercury commences later, and the quantity eliminated is relatively less in those cases in which the patient takes potassium iodide in conjunction with the mercurial preparation. If the iodide is administered during or after the mercurial course, the quantity of mercury eliminated daily is lessened. The iodide, therefore, appears to prevent the elimination of mercury, instead of hastening it, as has been believed by some, and would seem to be useless in cases of mercurial poisoning.—*Boston Med. and Surg. Journal*, November 10, 1887.

SYNCOPE FROM SYRINGING THE EAR.—MR. J. MIDDLEMASS HUNT reports the case of a boy, æt. 3 years, whom he found in profound coma, with slow, irregular respiration, rapid pulse, and dilated pupils, a condition which came on immediately after his ear was syringed for a purulent discharge. Mustard was applied to the nape of the neck and consciousness returned in a few minutes. The membrana tympani was extensively destroyed, but there were no signs of caries. Roosa records a similar case in the *Archives of Ophthalmology*, vol. ix, p. 19.—*Lancet* Oct. 15, 1887.

THE
Journal of the American Medical Association.
PUBLISHED WEEKLY.

THE EDITOR OF THIS JOURNAL would be glad to receive any items of general interest in regard to local events, or matters that it is desirable to call to the attention of the profession. Letters written for publication or containing items of information should be accompanied by the writer's full name and address, although not necessarily to be published. All communications in regard to editorial work should be addressed to the Editor.

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INJURIES TO THE FŒTUS DURING LABOR.

The exhaustive article on this subject, by PROFESSOR PARVIN, which is published in this issue of THE JOURNAL, will, we are sure, be read and studied with the greatest interest. And while it would be superfluous to go over, in this place, the points he has so ably presented, it may be interesting to notice some points brought out in the discussion following the reading of his paper; a discussion that must be regarded as a timely opening up of a very important and interesting subject, and participated in by Drs. W. T. Lusk, W. Goodell, Wharton Sinkler, C. B. Nancrede, H. C. Wood, and others.

In regard to fractures of the skull occurring in spontaneous deliveries, DR. LUSK mentioned a case reported by Veit, in which the patient received large doses of ergot. The child was born with the right parietal bone separated from its fellow, from the occipital, and to a great extent from the frontal bone, the parietal itself being fractured in two places. Dr. Lusk raises the question whether the cases of spontaneous fracture reported many years ago were due to the absence of "this certainly most unreliable drug"—ergot. He seems inclined to think that in some cases of depression of the skull it might be good practice to trephine, and elevate the depressed bone. With regard to delivery of an after-coming head retained by tonic retraction of the uterus, it must be remembered that great traction-force—and certainly less than 160 pounds in most cases—will almost surely tear the cervical tissues. If the head be retained at the brim of the pelvis, it is almost a matter of certainty, he thinks, that the child will be stillborn when the necessity for that amount of force exists; "it is a question whether we should ever use much force in pulling on the child; whether, indeed, the head cannot be better shoved through the pelvis by supra-pubic pressure, in the manner described by Dr. Goodell and Dr. Taylor." But Dr. Goodell, in discussing the paper, said: With regard to head-last labors, I have tried to deliver the breech by the use of the forceps on the buttocks, and have succeeded with them, but they are liable to slip off. I therefore always bring a leg down in breech cases, and then I have command of the situation. The force of traction which the neck will bear is uncertain, and doubtless varies greatly; but I believe that the man who, in trying to save the child, breaks the most necks, saves the most children, and I respect him accordingly. Such labors are always very dangerous to the child; the percentage of deaths is a very large one. I look on a child in breech presentation as a child drowning, to which help must be sped—help at all hazards. It is emphatically a case of "neck or nothing," and we must not sacrifice the life of the child to any sentimental considerations about breaking its neck.

A point emphasized by Dr. Lusk is that when the blades of the forceps cannot be applied to the sides of the head, they should be applied in the oblique diameter; otherwise, the blades may press directly on the forehead and occiput, and the pressure will ultimately affect the medulla, destroy the respiratory sense, and kill the child. It is especially in the flattened pelvis that this may occur, or that the pressure of the forceps may dislocate the occipital bone. In labor cases in which the arms become extended above the head—a thing that should not occur in a well-conducted labor—he thinks that the accoucheur is justified in breaking the arm to effect delivery. It is not always possible to follow the directions of obstetricians, to draw on the elbow and push the arm over the face, in time to extract the child alive. And in breech cases, in which the arm is bent around the neck of the child, it is almost impossible to extract the arm without fracture. "Then why not fracture the arm?" The physician is not responsible if the arm be broken in his efforts to release the member, "but he is responsible for the displacement of the arm behind the head. If he leaves the body alone and does not twist the trunk, the arm will not remain extended. The child does not spontaneously flex its arm and place the forearm beneath the occiput." In cases of breech presentation, with both extremities reflected upwards, and when the breech has reached the floor of the pelvis, Dr. Lusk still thinks that the application of the forceps is

easier than would be supposed, and that their use is less dangerous than that of the fingers or the blunt hook. If the breech be brought down to the perineum and then allowed to recede, and this be continued till physiological softening of the pelvic floor and perineum takes place, only a moderate degree of force is required.

Dr. Wharton Sinkler's experience is that a very large proportion of the cases of paralysis met with in infants are due to instrumental or prolonged and difficult labors. The most frequent form that we meet with is facial paralysis, either unilateral or bilateral. This generally results from the pressure of the forceps upon the facial nerve or upon the mastoid process. Facial paralysis may, however, result simply from the impaction of the child's head in the pelvis without the use of forceps. Hemiplegias are often met with in the newly born as a result of the use of the forceps. In regard to injuries to the sterno-cleido-mastoid muscle, he has seen cases in which the child has lost power in all the muscles of the neck so that it was unable to support the head. Some of the cases have been delivered by the breech and considerable traction made. Some have followed delivery by forceps, perhaps from pressure on the spinal accessory nerve, or perhaps from extravasation of blood. In the case of paralysis following difficult or instrumental labors, the lesion is often an extravasation of blood over the motor convolutions, a meningeal hæmorrhage. If the amount of the extravasation be great, the prognosis is, of course, bad, but in some of the cases, especially when there is monoplegia, when there is paralysis of one arm alone, the child entirely recovers the use of the limb; and in facial paralysis recovery, as a rule, occurs in a few days, but the condition may persist during life. Dr. H. C. Wood explained that we do not see hemiplegias and paraplegias due to injury during labor, in children of 5 or 6 years, simply because children so injured never live that long. What we do see are the cases of spastic paralysis. Spastic paralysis is the secondary effect of an early destructive lesion, the immediate evidences of which may have been entirely overlooked. "In all such cases presenting at my clinic I inquire as to the history of the labor; and invariably find that it has been unusually severe or instrumental. The brain at birth is so soft, so liable to injury, that while I would not have the obstetrician entirely discard the use of the forceps, I think he should never take them in his hand without bearing in mind the possibility that they will do serious permanent injury to the nerve centres of the child."

Dr. Nancrede believes the treatment of the injuries of the soft parts is too often left to the nurse, who either does nothing, or does that which ought not to be done. It has been recently shown that even the slightest injury of the scalp may end in periostitis, inflammation of the sinuses, meningitis, encephalitis, and often pyæmia. The prompt carrying out of antiseptic precautions greatly reduces the mortality from such injuries. Although in these cases certain forms of antiseptic dressing may be impossible, the principle of antisepsis is easily carried out in many ways. The Lister dressing, or the application of any irritant or poisonous substance, is out of the question. But we may use boric acid freely, and it has the special advantage of being a dry dressing. "I would call attention to the fact that simple fracture of the skull is in itself of no consequence. The injuries to be feared are those done at the same time to the adjacent tissues by the force which produces the fracture. If I should ever see a case in which I was convinced that existing paralysis was due to depression, I might trephine. The recently published statistics that seem to indicate that trephining under antiseptic precautions is entirely without danger, are not to be relied on, and while I am a thorough believer in antisepsis, I must call attention to the fact that as inflammation of the membranes or brain may occur from injury, without any break of the cutaneous surface whatever, you certainly may have the same after, and because of trephining, despite antisepsis. Trephining cannot remove many of the conditions referred to by Dr. Sinkler, which are the real sources of danger, such as effusion of blood upon the surface of the brain or in the arachnoid. Fractures producing epileptic seizures, etc., later in life, are rough fractures where projecting spiculæ or rough edges impinge on the brain or membranes; and such fractures — except, perhaps, *very rarely*, projecting rough edges — cannot occur in the infant skull, which is *devoid of* an internal table, from the shattering of which, in fractures in adults, secondary nerve trouble results."

THE SOUTHERN SURGICAL AND GYNÆCOLOGICAL ASSOCIATION.

A meeting for the permanent organization of this Association was held in Birmingham, Alabama, on the 12th of October, 1887, pursuant to a call by the Alabama Surgical and Gynæcological Association, which had been prompted by requests from many prominent physicians in the Southern States asking the Alabama Association to so extend

its membership as to include members from all the Southern States. The meeting was organized by the election of Dr. H. N. Rosser, temporary Chairman, and Dr. W. E. B. Davis, Secretary. A well considered Constitution and By-Laws were adopted. The second, third, and fourth Articles of the Constitution are as follows:

"ART. II. The object of this Association shall be to organize the profession of the South in the most efficient manner possible for the advancement of the sciences of surgery and gynecology.

"ART. III. This Association shall adopt and conform to the Code of Ethics of the American Medical Association.

"ART. IV. Any reputable physician, who practices surgery or gynecology, and who is vouched for by two members of the Association, and recommended by the Judicial Council, shall be eligible to membership in this body."

The following officers were elected for the ensuing year: President, Dr. W. D. Haggard, of Nashville, Tenn.; Vice-Presidents, Drs. R. D. Webb and J. W. Sears, of Birmingham, Ala.; Secretary, Dr. W. E. B. Davis, and Treasurer, Dr. H. P. Cochrane, both of Birmingham, Ala. The Constitution provides for annual meetings, to be held on the second Tuesday in September at such places as may be designated from year to year. The next annual meeting is to be held in Birmingham, Ala., commencing the second Tuesday in September, 1888. Dr. W. F. Hyer, of Holly Springs, was elected Orator. If the object of this new movement as declared in the second article of the Constitution shall be faithfully adhered to, as it doubtless will be, it will contribute much to advance both the social and scientific interests of the profession in the Southern part of our country. The association of surgery and gynecology in one Association can hardly be considered inappropriate, since the gynecology of to-day takes cognizance of little else than surgical procedures of some kind.

NEW YORK HARBOR AND QUARANTINE FREE FROM CHOLERA.

Such was the announcement when a few days since the last of the passengers of the Alesia, who had been detained several weeks in quarantine, were landed at Castle Garden in good sanitary condition. As the disease is rapidly diminishing in Italy and Mediterranean ports on the approach of the cold season, there is less probability of having more cases brought to our ports on shipboard during the next three or four months, but the danger of importing infected clothing or goods either directly or indirectly from places where the disease has been prevailing is not materially lessened. And the fact that such baggage may belong to passengers in good health, adds to the danger that it may escape detection by the health officers and be permitted to be carried to any part of the country. From the report of the Committee appointed by the Philadelphia College of Physicians, and from other sources, we think the system of inspection, detention and isolation of the sick at New York is more nearly complete, and affords a greater degree of protection from the introduction of contagious and infectious diseases than is afforded by the quarantine arrangements of any of our other important seaports. In one important respect, however, the system of New York, or rather the accomdations for rendering it most efficient, is defective. It is the failure to provide on the Island for detention of passengers from infected ships, a sufficient number of entirely separate cottages or barracks to permit the passengers to be accommodated in small groups. The detention of passengers who are well, after they and their baggage have been subjected to thorough cleanliness and disinfection, can be justified only on the supposition that they may have the infection already in their blood undergoing the incubative stage, and hence they should be held until the known period of incubation has passed. But if all the passengers are detained in one company, and only one case of the disease develops among them at the end of the period of incubation, whether it be seven, nine or fourteen days, the whole company are exposed again and must be detained during another period of incubation, and so on. While if the passengers had been from the first kept in small isolated groups, all the groups except the one in which the single case developed, could have been safely discharged at the end of the first period of incubation. Hence the practice of keeping all the passengers from an infected ship quarantined in one company, whether they number fifty or five hundred and thereby exposed anew to every new case that develops among them, is both unneccessarily expensive and unjust.

THE TENTH INTERNATIONAL MEDICAL CONGRESS IN BERLIN, 1890.

Soon after the adjournment of the recent International Medical Congress in Washington, the action of that body in recommending Berlin as the place, and 1890 as the time, for holding the next International Medical Congress, was officially communicated

to Professors Virchow, von Bergmann and Waldeyer, of that city. Through Dr. A. Martin, of Berlin, the reception of the communication has been acknowledged, and assurances given that they cordially accept the proposition to hold the Tenth International Medical Congress as proposed. The letter of Dr. Martin, addressed to Secretary-General Hamilton, gives assurance that so soon as the necessary preliminary conferences can be held, an official communication will be sent. This we shall take much pleasure in publishing as soon as it is received, and the columns of THE JOURNAL will be used freely for the promotion of the interests and success of the Congress to be held in Berlin, 1890.

INFLUENCE OF OCCUPATIONS ON MORTALITY.—The English Registrar-General has recently given the results of a comparison of the death-rate in classes following different occupations in England, that are worthy of serious consideration. Assuming the average death-rate for the whole population to be 1,000, the comparison shows the lowest death rate to be with ministers of religion, 556; gardeners and nurserymen, 599; and farmers and graziers, 631. On the contrary, the highest death-rate was with those directly connected with the liquor traffic and hotel service, 2,205; the general laborers in London, 2,020; the innkeepers, 1,521; and the brewers, 1,361.

SOCIETY PROCEEDINGS.

MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA.

Stated Meeting, May 25, 1887.

THE PRESIDENT, JOS. TABER JOHNSON, M.D., IN THE CHAIR.

DR. J. FORD THOMPSON showed the specimen and gave the history of a case of

TAIT'S OPERATION.

The patient was under the care of Dr. Freidrich and was seen by him in Nov., 1886. She was the mother of 9 children and had had besides 3 abortions. She has suffered intensely since her last abortion two years ago. The pain was mostly in the left side. She had been operated upon for a lacerated cervix some time ago by Dr. J. T. Johnson. She was having convulsions of an hysterical nature whether from the ovarian trouble or not it was difficult to determine for the history of their occurrence extended back to before her marriage. The convulsions would occur while she was being examined. Several consultations were held and it was agreed by all who saw her that a removal of the uterine appendages was the only chance of curing her. Her husband and herself being perfectly willing, the abdomen was opened Dec. 6, 1886. The uterus was found to be retroverted, the left Fallopian tube was enlarged, which together with the retroverted uterus prevented his reaching the ovary on that side. After a consultation with those present it was decided not to proceed further, so the wound was closed. The right ovary could have been removed with ease but he refrained from doing this because it would not make a complete operation and there was apparently nothing the matter with that ovary. The woman recovered from the operation all right, and remained well for a month when the symptoms returned with renewed violence.

The husband and patient ardently urged another operation, and, Dr. Taber Johnson having been called in consultation, it was considered justifiable. The second operation was undertaken with reluctance as the difficulties were known in advance. The incision was made in the line of the first one, and he was, on getting through the peritoneum, embarrassed by what seemed to be intestine adherent to the wound. It proved to be omentum and was easily got rid of. The retroverted uterus was tipped forward by one of the assistants and the left ovary was at last reached. It proved not to be enlarged, as might have been expected, but very firmly adherent. Starting, therefore, at the uterine end of the tube he passed two ligatures around it and cut between them. A little more of the tube was then taken up in the same way. He now turned to the right ovary which was found to be enlarged and somewhat adherent. The adhesions were broken down and the ovary and tube removed. He now went back to the left ovary and after much difficulty succeeded in shelling it out of its bed and removing it. There was but little hæmorrhage in spite of the lacerations on the left side. The wound was closed by silkworm-gut and quickly healed by first intention.

About a week after the operation he detected fluctuation on the right side and there was intense pain over this region. A few days after this there was meteorism and slight tumor in the right inguinal region. He cut down upon the tumor and evacuated a large quantity of pus from a pelvic abscess. He washed out the cavity and inserted a drainage tube, and the patient is now well.

The left ovary might possibly have been removed as usual but taking it out in sections seemed to have made no difference in the result. The case was an extremely bad one from the outset but she has now recovered from the operation and he hopes to have cured her.

DR. JOS. TABER JOHNSON reported

FOUR CASES OF REMOVAL OF UTERINE APPENDAGES.

Case 1.—Miss B., æt. 26, began to complain of pain in left side and abdomen in the Spring of 1874. Had also a hacking cough which greatly aggravated the pain. She was treated for asthma, rheumatism, neuralgia and diabetes, without benefit. In 1880 consulted another physician who diagnosed a retroversion of the uterus aggravated by long inattention, but curable. This history is given from a written

statement made to me by the patient and I continue, using her own words: "I was treated for this retroversion and cough for three years, and at the end of this period not being satisfied with my progress, consulted another physician. The most distressing feature of my condition was the neuralgic attacks, as they were called, but are now said by Dr. Johnson to be recurrent attacks of pelvic peritonitis. Beginning sometimes with nausea, oftener with a beating pain at the base of the spine which gradually increased until it came in surges, enveloping the entire abdomen and stomach, lasting generally an hour and in effect several days. These attacks invariably followed any variation in the simple life I was at that time obliged to lead. Dr. S. abandoned the pessary and in addition to local treatment, attempted to build up the system by tonics, etc. This plan entirely failed, and in the Summer of 1883 (being North as usual), occurred the most violent of these attacks above alluded to, which was a four weeks' siege. During 1883 and 1884 I had a number, more or less violent. In the winter of 1884, while in Boston, I consulted Dr. B., and under his advice commenced the use of hot soft baths and douches to remove an adhesion which he said existed. After sixteen months trial of these baths and iodine and the intermittent use of the pessary, I returned to Washington very little benefited. Under the treatment of Dr. Jos. Taber Johnson I was enabled to do without the pessary for some time, but still suffered when I walked or took any exercise from my chronic ovarian inflammation as he called it. By his advice electricity was tried about twice a week, administered by Dr. Cuthbert, for a year, but no permanent relief was obtained. Dr. Busey was called in consultation and after listening to my history said that as about everything which he would suggest had been already faithfully tried, he had only two suggestions to make; one that I remain in bed for a year and the other was that the ovaries be removed. As I had been practically at rest for the past three years, that course did not promise much. Dr. J. had already talked of the operation, and after thinking the matter over and talking with my family and friends about it, and after having a full explanation of its effects and possibilities I concluded to have it done."

Miss B. entered the hospital March 6, 1887, and her ovaries and tubes were removed on the following day, in the presence of Drs. Cutts, Cuthbert, S. S. Adams and the house physician. Not much trouble was experienced in the operation and the patient made a rapid and perfect recovery. She has had no menses or pain in the abdomen since and is perfectly satisfied and happy over the results. She still has her asthma, and when she walks or stands too long has symptoms produced by her retroverted uterus and pressure on the rectum, but these are gradually disappearing. I am doing nothing for her, expecting the atrophy which accompanies the change of life to finally relieve her uterine symptoms. In answer to a note inquiring her present condition for the purpose of adding to the history of her case, I received, yesterday, the following reply:

"Monday, May 23, 1887. My dear Doctor: I am more and more thankful that I had the operation done, and will not have to drag out my days in endless pain and misery. I have been entirely free from the old pain and as soon as I can regain my strength I expect to be unusually strong and well. This I am slowly, but surely, doing. Sincerely, etc. Ella B."

Case 2.—Mrs. B., æt. —, married, children. Within the last — years has been greatly troubled by profuse menstruation, which at times amounted to fearful hæmorrhages. I was requested to see her by her physician, Dr. C. W. Franzoni. He had already discovered a uterine fibroid which he thought was the cause of the loss of blood. Upon several occasions she was greatly reduced by the flow, and hardly recovered from its effects before another one came. Twice it was feared that she might bleed to death before the hæmorrhage could be arrested. After a careful examination and deliberate consultation it was agreed that Tait's operation for the relief of bleeding uterine myomata offered the best prospect, and it was therefore recommended after a course of treatment with ergot. The husband and wife readily agreed to take the risks, which were fully explained to them. Mrs. B. entered a private room at Providence Hospital on the 13th of February last, and the operation was performed two days later, in the presence of Drs. Franzoni, Cutts, Cuthbert, Crook and the house physician. She made a good recovery and has had no loss of blood since the operation. She is now well and hearty, and attends to household matters as well as she did before the growth of the tumor.

Case 3.—Mrs. H., from Georgia, æt. 40, married for fifteen years; no children; has been a sufferer from pain and hæmorrhages for the past seven years. She was for some time under the care of Dr. Robert Battey, of Rome, Ga., and became an inmate of his Infirmary for the purpose of having her ovaries removed to cure the fibroid enlargement of her uterus, which was diagnosed to be the cause of the hæmorrhages. Just before the time fixed for the operation Dr. Battey was unfortunately taken sick, and as the date of his recovery was doubtful, and she had gotten her courage up to the point of an immediate operation, she determined to come North and have it done before her next period should set in and exhaust her again by such a dreadful loss of blood as occurred every month. Indeed, she and her two sisters, who came with her, feared she would not survive another period.

Upon examination I found a fibroid tumor reaching nearly to the umbilicus. It fortunately did not press upon the rectum, though it greatly interfered with the bladder. She was very nervous and especially feared meeting with strangers. She was entirely satisfied with Dr. Battey's diagnosis; and as I perfectly agreed with him in the propriety and necessity of removal of the uterine appendages as a means of cure, she and her sisters declined any further consultation. As soon, therefore, as she was rested from her journey, and five days before she expected her next period, I removed her ovaries and tubes in the presence and with the assistance of Drs. Cutts, Cuthbert and the house physician, Dr. Luce.

A large vascular fibroid growth lay directly under the abdominal incision. It was turned somewhat sidewise, bringing the left ovary and tube very easily within reach. It was drawn out of the wound, and with the Fallopian tube removed without any difficulty. The ovary was enlarged to double its natural size and in one extremity was a hæmatoma which ruptured in my fingers. The other ovary was far down under the tumor, and it was with the greatest difficulty brought up sufficiently to enable us to get a ligature under it. I feared to draw too strongly on the very vascular-looking tumor, having in mind several experiences of Dr. Keith where, under similar circumstances, he had accidentally torn the covering of the tumor and set up hæmorrhage requiring the performance of hysterectomy to control it. I transfixed and ligated under the ovary, but could not remove the entire organ without endangering my ligatures. The cautery was, however, very thoroughly applied to the stump, thus destroying, it was thought, any of the ovarian stroma left behind.

The patient has made a good recovery. It is now three weeks since the operation, and no menstrual flow has made its appearance, though one was due and expected five days after the removal of the appendages.

In the last two cases the ovaries and tubes were removed solely for the purpose of arresting the growth of uterine myomata and their accompanying hæmorrhages, and without the slightest purpose or thought that they were themselves diseased. Experience has amply demonstrated the value of this mode of treatment of small uterine myomata. When these tumors are very large, say from 15 to 50 lbs., ergot, electricity or hysterectomy, in the order mentioned, offer better prospects of a cure.

Case 4.— Miss B., æt. 23, single, began to menstruate in 1879, when she was 13½ years old. Has from the first suffered with much pain and has always been irregular. Pain in back, hips, limbs, head and neck, and nausea which for years has prevented her from taking sufficient food. Pain at first in left ovary, but of late years worse in right, especially during her periods; formerly attended with slight convulsions. Has never been able to take violent exercise, such as running, dancing, jumping, etc., without producing severe pain in her side, sometimes the left, at others the right, with headache. Of late years could not attend church, go in company, or stand any excitement; so that life gradually became a burden with scarcely any pleasure in it. Had typhoid fever in 1882, and two and one half years elapsed before her periods returned again. During this time she frequently had convulsions, just about the time for the regular flow, but with no sign of a flow. She says in her written statement to me: "The convulsions generally lasted two or three hours, and I was generally very sick for two or three days afterwards. Since the return of the menses they have been more painful than ever. For the past year and a half I have not been able to walk three squares, cannot sweep, dust, or go up and down stairs or lift any ordinary weight, or stand on my feet for any length of time, without it producing pain in my back and in the lower part of the abdomen, generally worse on the right side, and intense bearing-down feelings. Any exertion of the arms produces severe pains in the back of the head and neck; this pain is much worse during the monthly periods. I am so nervous all the time that any excitement, fright, sudden joy, or any sudden noise will make me start, and sometimes produce a nervous chill lasting fifteen or twenty minutes. The monthly flow is generally attended by intense itching and burning and great soreness of the parts. I have used the hot water injections for years, but I found it was not benefiting me any, so I gave it up. Have been treated for falling of the womb, used cotton supports and pessaries, but they did me more hurt than good. Have had a dry hacking cough and palpitation of the heart."

Dr. Little brought this lady to me about four months ago. After hearing her history of pain and suffering for some years, I suggested the removal of the uterine appendages as the only rational mode of treatment. This was opposed, and I have treated her with various applications, iodine blisters, tonics, feeding and electricity. I did her no good for three months, and then declined to treat her further, repeating my first advice. I saw nothing else to do, but advised her to seek other advice and return to me in six months, if no better. In about one month she returned. Both she and her family requested to have the operation performed. Its risks and effects were fully explained. She took a private room at Providence Hospital, and I removed her appendages last Monday at 10 A.M., in the presence of Drs. Cutts, Cuthbert, Little and Luce.

The uterus was a good specimen of what is called the infantile uterus. The ovaries were adherent; one was difficult to remove on this account, and was enlarged and contained cysts. They both appear to be in a state of chronic inflammation. The patient is doing fairly well so far. Her pulse has been too rapid since the operation, but she shows no evidence yet of peritonitis. I expect she will recover and be cured.

DR. JOHNSON also reported a case of

CÆSAREAN SECTION; DEATH ON TENTH DAY.

I was summoned by Dr. J. W. Bayne early on the morning of April 5th to perform Cæsarean section upon a colored woman who had already been more than two days in labor. I made the necessary preparation and went to the residence on New Jersey avenue, about four squares southeast of the Capitol. We found her in a little hut nearly if not quite fifteen feet below the level of the street. The place was devoid of anything which might properly be called furniture, but was thoroughly filled with smoke from a rickety old stove, and bad smells. There were from six to ten colored women, a d a few men and boys, standing about; and with the four doctors who had been in attendance during the night, and myself, we made a curious and anxious audience of a dark and tragic scene.

The following is a history of the case: Mrs. J., colored, age uncertain, but said by her mother to have been born ten years "fo' de wah," and the

mother of six children, had been unusually weak troubled with a cough during the last three months of her pregnancy. Was taken in labor two days before and sent for Dr. Chew, after pains had been going on for some time. He found the head of the child in the left iliac fossa, but it had not and could not be made to properly engage. After much waiting forceps were applied; they repeatedly slipped off, and Dr. Chew then called to his assistance Drs. Mallen, Dunn and Bayne. During the night before I saw the patient she had been at one time under the influence of ether four hours, while prolonged and repeated efforts were made with the forceps. Version also failed to dislodge the head, although one foot was drawn down and out of the vulva. The head could not be pushed up by any of the gentlemen. Dr. Bayne finally performed craniotomy in the hope of so diminishing the size as to enable him to extract it. Effort at delivery with the crotchet and blunt hook entirely failed. When I saw her and learned that she was the mother of six children, and that craniotomy had already been performed upon this child, I expressed the belief that she could and ought to be delivered without Cæsarean section. I was invited to try, and the patient was etherized and I did try, but the impaction was so great and the contractions of the uterus so continuous and powerful that I accomplished absolutely nothing. All present were anxious that the child be immediately delivered, including the mother and husband; and I reluctantly consented to proceed with the operation.

The surroundings could not have been worse, unless it had been in the night. We made the best preparation we could. An operating table was improvised by taking a door off its hinges and placing it across the backs of two chairs. I made an antiseptic solution by using some of Wyeth's tablets of the bichloride, and with it washed the patient's abdomen. I placed my instruments in a bowl of hot water. The patient was as well protected with blankets as we could provide. The urine was drawn off by Dr. Mallan, and with Drs. Chew, Bayne, Mallan and Dunn to assist, I began the incision just below the navel, and cut rapidly down upon the uterus, to within about two inches of the os pubis. There was scarcely any hæmorrhage. Dr. Bayne skilfully compressed the walls of the abdomen against the uterus, thus preventing any escape of intestine, and at the same time preventing any fluids from the uterus entering the abdomen, and steadying the organ itself. Expecting much loss of blood as I cut into the uterus, I hastened this part of the operation, and as soon as the child was visible extracted it and the placenta without any difficulty. Dr. Bayne at once compressed the fundus, completely preventing hæmorrhage from the placenta site. I doubt if two ounces of blood were lost in the entire operation.

The uterine cavity was sponged out with the bichloride solution, or rather the water was squeezed out of the sponge into it. The muscular structure was brought together with eight interrupted carbolized silk sutures, thoroughly coaptating the cut surfaces. Effort was made not to include the mucous coat, and as the post-mortem shows, sufficient hold does not appear to have been secured by the last three stitches.

After cleaning out the abdominal cavity, the incision in the walls was united by about fifteen sutures, and the wound was dressed with iodoform gauze, a firm compress and flannel bandage. The operation was completed in about fifty minutes. The patient was made as clean and comfortable as circumstances would permit. She was placed in a large bed in which she had been wallowing about for the two previous days of her labor, and which had done duty for a large family for a long time; clean sheets and pads were loaned by the neighbors, and the bed filled with hot bottles, bricks and flat-irons, to restore and retain warmth to her body. Her pulse could not be counted the first twenty-four hours after the operation, and she had a number of hypodermics of whiskey.

I should have mentioned that when the abdomen was opened, we could all plainly see where the uterus had been bruised, and had turned very dark—almost black—where the head had been impacted so long, and the parts bruised and injured by the repeated efforts to press and push it out. She rallied very well, and seemed free from pain, and after the first thirty-six hours took a large quantity of liquid food. Her pulse continued between 140 and 120 for several days, but her temperature remained at about 101°. She seemed at one time to have a fair prospect of recovery, but the circumstances were all against her. She had no nurse; was on a bed reeking with foul smells until Dr. Chew and I bought and fitted up a cot upon which we lifted her. We changed her clothing, washed and dressed her daily, begged linen and under-clothing for her from our friends; washed out her vagina and uterus frequently. I saw her twice daily, and Dr. Chew six times daily, the last visit generally about midnight. She could not have had more medical attention if she had been a millionaire. Upon the evening of the 9th day her pulse began to fail, though her temperature was only 101°. She lost her desire for food, and died at 10 A.M. on the 10th day after the operation.

I asked Dr. Lamb to make the post-mortem. She seems to have died from the effects of an abscess found below my incision in the uterus, which was probably the result of the bruising of the uterus in the vain effort to push the head out of the left iliac fossa where it was so long impacted, and also by the general nastiness of her environment.

It may surprise members of the Society that the operation was necessary at all. I was at first surprised myself, and declined to perform it until after I had failed to relieve the impaction with the woman thoroughly etherized. I think if any objector had been with us, he would have agreed finally with us. It might perhaps have given the woman a better chance if the bruised uterus had been removed altogether, according to the Porro method, but the gentlemen present all agreed upon the Caesarean section, and it was done. Great care was taken to bring the serous surfaces into perfect apposition, and the post-mortem shows it to be thoroughly united.

Dr. Parish, in the last number of the *American Journal of Obstetrics*, gives an account of a Porro-Müller operation, performed on account of impacted shoulder presentation. There are some points of resemblance between his case and the one just narrated. His patient had been several days in labor. Several skilled obstetricians had failed after prolonged and repeated efforts to produce podalic version; the patient having been six or seven hours during the last day of her labor under ether. There was an unrelieved impaction. The uterus was so firmly compressing the body of the child that it was found after many trials by four good obstetricians to be practically impossible to turn and deliver it. In his case, as in mine, Cæsarean section was agreed upon, all knowing the child to be dead; and it was deliberately chosen as the mode of delivery instead of embryotomy. Dr. Parish subsequently determined to remove the uterus on account of the damage which that organ had sustained. His patient died in less than two days; mine lived ten days, and died finally, as I believe, of an abscess at the point where the greatest bruising had occurred. I have an idea if the Porro operation had been performed, thus amputating the uterus below the injured point, and she could have been so circumstanced as to have had proper nursing and hygienic surroundings, she would have recovered.

Dr. R. P. Harris, in the discussion of Dr. Parish's paper, remarked that "the Cæsarean operation has been performed in the United States in cases of impaction of the fœtus in a transverse position twelve times." In eleven cases the fœtus was dead; in two only of the twelve was the pelvis deformed; nine, or 75 per cent. recovered; of the three lost one was ninety-six hours in labor, three days in charge of a midwife; another was twenty-six hours under a midwife who had given ergot and ruptured the membranes; and the third had been long in labor, time not stated. In these cases of impaction of the fœtus in transverse positions, we do not have presented to us the indication for the early Cæsarean section so eloquently pleaded for by Dr. Harris, which is present in cases of pelvic deformity. In these latter cases a knowledge of pelvimetry will demonstrate the impossibility of extracting even a craniotomized child through the natural passages, but in the former cases physicians are actuated to delay by the hope of being able to break up the impaction, and to finally deliver the child *per vias naturales*.

It is rare that the uterine contractions become so constant and tetanic as not to relax and yield under the influence of prolonged anæsthesia.

It becomes a nice point to decide, especially in women who have previously given birth to live children, in any given case of impaction when efforts with the forceps or by version should be suspended, and the Cæsarean section or the Porro operation proceeded with. The 75 per cent. of recoveries in cases of the Cæsarean section in the United States, for the relief of impaction in the transverse position, reported by Dr. Harris, gives no great encouragement to study these cases more strictly, but it seems to me there will always remain great doubt when to suspend efforts at delivery through the natural passages and to perform the Cæsarean section or some of its alternatives.

Mrs. J., colored, died May 4, 1887. Necroscopy by Dr. S. S. Lamb; abdomen only examined. Track of incision in abdominal wall partially healed. A delicate pseudo-membranous layer united front of uterus to abdominal wall. Some hyperæmia of peritoneum. Pus in utero-vesical pouch. Lower three inches of anterior wall of uterus contained eight interrupted sutures (silk); around some of these suppuration was going on. The uterine incision had healed except where the lower sutures had failed to include the entire thickness of wall. Internally the uterine surface was red, green and blue, and soft; towards the vaginal end were two pus pockets and uterine surface was gangrenous. Vagina showed sloughing ulcers.

DR. BUSEY asked Dr. Johnson why he could not turn, in the case upon which he did Cæsarean section, and also if any ergot had been given?

DR. JOHNSON replied that he attempted to turn, but could only get his hand up a little way when it came to a full stop. The case had been in the hands of a midwife for two days before she was seen by a doctor, and he does not know whether ergot had been given or not.

DR. BUSEY remarked that in one of the histories read by Dr. Johnson and written by the patient, he is quoted by her as having advised her "either to remain in bed a year or submit to the operation." His recollection of the advice he gave differs from this statement. He does not know why he should have advised her to have remained in bed a year, as he cannot conceive that it would do her a bit of good. He agreed with Dr. Johnson as to the advisability of the operation.

DR. JOHNSON thought that the patient had grounds for the belief in this way; in the course of the conversation, as he recollects it, Dr. Busey told her that as everything had been done for her except lying in bed for a year, she might get some good from this treatment, but that other disorders would likely be engendered which would be nearly as bad as the present trouble.

DR. T. C. SMITH said that he did not criticise Dr. Johnson's treatment by Cæsarean section, but he wanted to call attention to the fact, that this is the fourth operation of the kind done in this city, and that the mortality was 100 per cent. The point is that there are cases which ultimately require Cæsarean section, but which do not appear to at first. As in this case the woman had the best of treatment without success, and then Cæsarean section had to be resorted to. The operation is unfortunately looked upon as a *dernier ressort*. From what we know of this case now, it seems as if the woman would have had a better chance of recovery if the operation had been done earlier, but no doctor here would have done it then. The bruising of the uterus which is present might have been avoided by an earlier operation. As it was the woman would probably have died anyway.

Dr. J. Ford Thompson said that he wanted to say a few words in regard to the technique of Dr. Johnson's operation. If he operated as he described it the Säenger method was not followed exactly. For instance, no temporary ligature around the neck of the uterus was used. This is a very important step, as without it hæmorrhage on removing the placenta is very probable, while with it, the subsequent steps can be done leisurely. The serous surface under the sutures, also looks as if it was healed, but it is not united by Säenger's method of suturing. It is the safest, first to use a line of buried stitches, and then put in the interrupted Czerny-Lembert suture—which is the method now being used.

Dr. Johnson remarked that Dr. Thompson's criticisms were pertinent, and in the line of perfecting the operation. There were two reasons why he did not apply the ligature. One was, that he did not have one, and the other was, that the child having been dead for so long he did not expect much placental circulation. There being some doubt as to the patient's getting off the table alive, the wound in the uterus was closed as quickly as possible. If we could take the steps as deliberately as did Dr. Lusk recently, there might be some chance of success. (See The Journal, May 21, 1887.) He agreed perfectly with Dr. Thompson in the propriety of operating upon the case he has just reported, and he thought his prompt evacuation of the pelvic abscess probably saved her life. The adhesions found were, he thought, a perfect explanation of her sufferings.

Stated Meeting, September 23, 1887.

The President, Dr. Joseph Taber Johnson, in the Chair.

Dr. T. C. Smith presented and read the history of a case of

HYDATIDIFORM MOLE.

(See page 686.)

Dr. King: Such a valuable paper should not be passed without some comment. In fact, so little is known of such growths that there is not much to say, and Dr. Smith has covered the whole ground in his paper. The history is the usual one of suspected abortion. He had a case some years ago in which he diagnosticated hydatidiform pregnancy, and wished to empty the uterus, but the patient declined the operation, stating that Dr. J. H. Thompson (Columbia Hospital) had wanted to do this three months before, but she would not allow it. After three or four months she was attended by the late Dr. Drinkard for the same trouble, which was at first considered to be an abortion.

The President said that there were several interesting points in the paper. Recurrence is usual in such cases. The fleshy moles deserve consideration. The liability of the woman's character being affected should guard us in the diagnosis.

Dr. King: Moles are of two kinds, true and false; the first occur with pregnancy, but the second do not. If the mass be due to pregnancy, the chorial villi can be detected by the microscope after washing away coagulated blood-clots in a basin of water. False moles, having no connection with pregnancy, might be due to semi-organized blood-clots, polypoid and fibrous growths, and the desquamated membrane of membranous dysmenorrhœa. This last could be diagnosticated by the membranous sac presenting three openings, those of the two Fallopian tubes and the internal os uteri. The main point of differential diagnosis is the detection of chorial villi in true moles.

SUFFOLK DISTRICT MEDICAL SOCIETY.

Section for Clinical Medicine, Pathology and Hygiene.

Dr. F. I. Knight, Chairman.

Albert N. Blodgett, M.D., Secretary.

Regular Meeting, Wednesday, October 12, 1887.

Dr. W. Everett Smith read a paper on

A CASE OF POISONING FROM ARSENICAL WALL-PAPER.

About the middle of September, 1886, my patient, Mrs. S., changed her residence from the country to the city. She very soon discovered that some ferns in her parlors were withering, but not from neglect or improper care, since although ultimately dying, they revived for a brief season upon being removed to another part of the house. In the early part of November, she suffered from an attack of nausea and a dizziness so intense, especially when she attempted to stoop, that for several days she was obliged to keep the bed. These symptoms persisted in their intensity about a fortnight, and were followed by a sharp attack of facial neuralgia which lasted about a week. In the latter part of December, the dizziness re-appeared, but in a far milder form than it had been the month before. At about the same time she began to complain of extreme lassitude and a loss of pleasure in pursuits that formerly gave enjoyment. The quiet of her own room was the one thing that she eagerly sought.

Although she suffered from a continual slight nausea, her appetite was unusually good; there was, as she expressed it, an almost constant "gnawing in the stomach." After the eating of food the nausea would increase, and she would complain of a feeling of heaviness and uneasiness throughout the bowels, especially in the umbilical region. Her increase of adipose tissue began to be distressing to her. Although she had always before drank very little water, she now was thirsty all the time. The menstrual functions continued to be regular, so that the symptoms presented were considered to be indicative of over-work and loss of nervous energy rather than of any physiological disturbance. The patient herself was disposed to consider her symptoms malarial in their nature, although, contrary to her expectations, quinine gave her no relief. Occasionally, she would speak of her eyes smarting and watering if she tried to use them.

Suddenly, on March 16, 1887, she was taken without any apparent cause with headache, extreme nausea, and uncontrollable vomiting. The usual antiemetic remedies, internal and external, dietary and medicinal, were tried in turn, but all without relief. On the contrary, they seemed rather to increase her distress. The only expedient that gave the slightest resemblance of relief was the holding of pieces of ice in the mouth. The vomiting was almost incessant, and was increased by assuming the recumbent position. The vomitus consisted at first of mucus, on the third day of free blood, and later of thick yellow bile. Tenderness in the epigastric and right hypochondriac regions speedly developed itself. The temperature and pulse remained nearly normal. The nasal discharge was uniformly bloody. The menstrual functions still remained normal so that the symptoms seemed to indicate clearly an acute exacerbation of the same trouble that had existed all winter in a mild and chronic form. Although I could not absolutely exclude either a primary gastroduodenal ulceration or some of the freaks of pregnancy, I remembered the withering of the ferns and began strongly to suspect some form of irritant poisoning to be the cause of sickness. I accordingly sent samples of all the wall-papers in the house (except, of course, plain "cartridge" papers which I knew to be practically free from suspicion) to Dr. Edward S. Wood for examination. Upon analysis, he pronounced only one paper arsenical, but found such an amount of arsenic therein, that he advised its immediate removal.

To settle decisively the question of poisoning, the urine also was examined for arsenic. Six ounces collected on March 23, the eighth day of the incessant vomiting, yielded numerous crystals of arsenic after re-sublimation in the tube, while a quart of urine collected three days later yielded a very dark deposit upon the tube, but after re-sublimation, scarcely a trace of arsenic crystals. This seemed to indicate not only that there had been a very large amount of arsenic in the system of my patient, but also that a rapid elimination of the poison was taking place. But the vomiting and prostration continued unabated. For twenty days the patient could retain absolutely nothing upon the stomach. Enemata, both of beef tea and of Murdock's food were attempted, but could not be retained. Finally, brandy was substituted for them and with better results. The temperature had never risen above 100°, nor the pulse much above 96. At midnight of the twentieth day the nausea and vomiting ceased as suddenly as it had begun. The following morning the patient expressed her first desire for food. We began with Horlick's Food, and although during the next week we changed at her request to Mellen's, Hard's and to Wells and Richardson's Lactated Food, we returned to Horlick's and found it the best suited to the case. The recovery was rapid and complete in less than a fortnight. There was only one relapse that could be traced directly to arsenic.

It had seemed at first improbable not only to myself, but to Drs. Wood and Whittier, whom I consulted in the case, that the wall-paper already found to contain arsenic could be the sole cause of all this arsenical poisoning. The paper was upon the walls of a small room on the entrance floor of the house where the patient had been very little, the parlors were on the floor above, and her chamber on the floor above the parlors. In hopes, therefore, of finding some other source of arsenic, dress goods and window draperies were analyzed, but with negative results, so far as finding arsenic were concerned. Chromium was, however, found in large amounts in one pattern of dark-green dress goods. I had early seen to it that all cretonnes and turkey-red material were removed from the chamber, since they are well known to be highly charged with arsenic. The almost conclusive proof, however, that the sole cause of my patient's sickness existed in this room is as follows: The dangerous wall-paper was removed while the patient was convalescent. She insisted that she was not yet strong enough to venture from home and so remained in the house, confined strictly to her room, while the work went on. After the walls had been scraped and washed, and the room thoroughly cleaned preparatory to the laying of the new paper, she ventured to look into the room, but remained there scarcely ten minutes. She very soon had a return of nausea and vomiting, which lasted nearly twenty-four hours. I thereupon insisted that she go into the country, and that in her absence the entire house be thoroughly cleaned and dusted. This was done, and since her return she has presented no further symptoms of arsenic poisoning.

Another member of the family was affected by the removal of the paper, his symptoms taking the form of a sharp diarrhœa. The other two members did not at any time present marked symptoms of arsenical poisoning, except a noticeably sallow complexion and a pretty constant feeling of lassitude all winter. They had, however, had more exercise in the open air than my patient.

I trust the record of this case may stimulate physicians to investigate more thoroughly than they otherwise might, cases that they hastly assume to be the results of malaria, nervous prostration or other indefinite or undetermined causes. Many of these cases I believe to be simply chronic poisoning from some material source near at hand. The profession has learned that wall-paper and some kitchen utensils are often arsenical, and it is slowly realizing that articles of clothing and of household decoration may likewise be injurious to health, although the subject has not yet received the attention that it deserves. It seems to me that it is our duty, as physicians interested in public health and preventive medicine, to make renewed and concerted efforts to secure such laws as shall make it a criminal offense for a manufacturer to allow any deadly poison to be in fabrics or materials that are used or that are sold upon the market.

DR. B. F. DAVENPORT said: It may be of interest to the Society to know, in connection with this case, that the German government has, during the past summer, passed a new law, to go into effect next spring, in which the presence of two-and-one-half

grains of arsenic per square yard is allowed in woven goods, provided it is in an insoluble (?) condition. The presence of arsenic in any arsenical color is forbidden if the arsenic is present as a constituent part of the color; but if it is present simply as an impure material, the law forbidding its presence does not apply. What the grounds for these limits of the new German law are I do not know, but presumably they are placed on some competent experiment.

DR. F. I. KNIGHT asked if that would modify the law in relation to the manufacture of colors also.

DR. DAVENPORT: Yes. The old German law, which is at present upon the statute books, forbids the presence of arsenic in toys and wall papers, but its enforcement has been suspended, and they allow the presence of arsenic in other things, provided they are to be exported. They are not so particular about other nations as about their own. That reminds one of the oleomargarine law in one of the western cities. The dairy commissioner, reporting on the subject, said it was immediately gotten rid of by shipping into the neighboring States.

DR. ALBERT N. BLODGETT said: I would like to ask Dr. Smith what degree of reliability is to be placed on the testimony of paper manufacturers or paper dealers as to the presence or absence of arsenic in their manufactured fabrics. A short time ago in a discussion before this Section the statement was made that the certificates of chemists were often utterly valueless; that paper which was pronounced by competent chemists free from arsenic was found to contain large and dangerous amounts of it. I would like to ask if Dr. Smith has had any experience in the proving of certificates of the chemists of manufacturers in regard to the compounds of arsenic in paper, and what value he places upon them.

DR. SMITH: When I was re-papering my rooms, I was in some doubt as to what dealer to go to, Bumstead, or Gregory & Brown. I went to the latter, and picked out papers that I thought I would like, and saw the analyses. The papers were said to be free from arsenic. I did not engage them to hang the paper, but engaged a wall decorator; he traded for the most part with another firm, the Boston Wall Paper Company. They had a chemist of whom Dr. Wood and Dr. Harrington had never heard. They had specimens which were said to be free from poison. I finally purchased of Gregory & Brown. Dr. Harrington had marked one specimen "Practically free from arsenic." I went to Dr. Harrington myself, because I wanted to know how much it contained. I should place very little reliance upon the statements of any dealer in wall paper, because he is in one sense an interested, and in another sense an uninterested party. He may sell arsenical wall paper in perfectly good faith. He receives it from the producer, and takes the word of the chemist. If it proves to be full of arsenic, of course if there were a law, he would be subject to penalty.

When I was getting the paper, Dr. Wood told me an experience that he passed through. He changed the paper in his house while he was at the sea-shore. Dr. Hill one day asked him what paper he was putting on the dining-room. He replied that it was from a lot which had been examined, as the dealer said, by Dr. Hill himself. Dr. Hill was sure he had not seen it before, and on analyzing it, it was found to be a typical arsenical paper. Mr. Bumstead had the paper taken off at his own expense, and Dr. Wood said the paper-hanger had the most typical case of inflammation about the nails that he ever saw. I think Bumstead, although he has made some mistakes that were reported here last winter, has always acted fairly when he has found any paper that contained arsenic. I am sure that Gregory & Brown are very careful.

DR. DAVENPORT said: It is well to remember that the certificate of the chemist applies only to the particular sample examined. It does not apply to another roll, whether of the same pattern or not. Two rolls of the same pattern may be quite different. One may be free; the other may contain a considerable amount of arsenic.

DR. SMITH: The reason why I spoke as I did about the law was because Dr. Wood said he had been at the State house, in relation to the matter, but has been rebuffed every time. Testimony is brought forward to controvert his own. If the law were passed, he would be cutting his own fingers, for he gets some income for analyzing the papers. He has been one of the most strenuous in pushing the law at the State house. I would like to ask Dr. Davenport whether arsenic in wall paper does not exist for the main part as an impurity.

DR. DAVENPORT: I presume it does. Most wall paper in this vicinity is manufactured by the American Wall Paper Company. They claim, and with reasonable evidence in favor of it, that they do not now use arsenical colors at all, and do not intend to have arsenic in their paper. I have understood that they had last year a thousand samples of paper, just as it came from the factory, analyzed, and they found that it contained arsenic on the average in some 66 per cent. of samples.

The stock from which the paper is made is largely clay, and this, as well as the ochre, may contain arsenic. All papers with gilt contain arsenic; that is, practically all; because commercial copper is very seldom free from arsenic. Of course the bronze contains copper and zinc. Gilt from the American ore is generally free, but imported ore generally contains arsenic. Then, as all chemicals are made more or less directly with the use of sulphuric acid, which is made from pyrites, it may come in that way. And so, well nigh everything, unless it has been specially freed from it, would contain a trace of arsenic.

DR. SMITH said: It seemed to me that the amount of arsenic which would thereby creep into the color would be very small, but I supposed that the arsenic was used as a mordant, and was not washed out.

DR. DAVENPORT: As a mordant, quite a number of large cotton print-mills use twenty tons of arsenic a month. A common piece of print cloth may contain three, four or five grains of arsenic per yard.

DR. SMITH had been told last June that Mr. Binney, employed by the Walpole company, made the strong assertion that arsenic had no business in the

chemistry of coloring material at the present time; that it was the lazy greediness of the manufacturers, who allow it to remain in their colors; that they do not take time to wash it out thoroughly.

DR. BUCK said: There is one element of danger in papering rooms which does not often come up here. We may have a paper perfectly free from arsenic, and still get arsenic poisoning. A certain number of paper-hangers put arsenic in their paste, and that gradually gets through the paper. I would like to know if any one has seen differences in the number of cases reported in different seasons of the year. In my experience, I have seen more cases in the summer than at any other time. I have seen many paper-box workers during the summer, and although I have had the dispensary work to do at other seasons of the year, I have not seen these patients during the winter or fall months. They have presented themselves chiefly during the early summer. I have thought that possibly it might have something to do with the heat, there being a greater degree of volatility at that season of the year.

DR. VICKERY: Would paper containing two-thirds of a grain to the yard be poisonous?

DR. DAVENPORT: Whether it would be poisonous is a question of dispute. Some say yes, and some no. Nobody knows.

DR. BLODGETT: I would like to observe that the chemist of the Roxbury Carpet Works, in which nearly all of the various colors are employed, informed me that he never used arsenic, and that it was entirely unnecessary and out of place in the production of any color, and that it was perfectly possible to get all the advantages found in arsenic from other and safe means. He expressed himself very strongly, and said that the presence of arsenic even as an impurity was unnecessary if proper care was employed in the selection of colors.

DR. SMITH added that a former occupant of the house where this patient lived had died from some obscure trouble, having had stomach and head symptoms. She supposed it was the drainage, and the plumbers had been over the house again and again, but they pronounced everything in good order. Perhaps the present case may give us some hint as to the cause of that sickness and death.

DR. PENGRA: In what form is the arsenic set free from the wall papers? Is it in the form of gas or solid?

DR. DAVENPORT: I believe it is now commonly considered that the danger is from the dust which is removed from the surface and inhaled. It was claimed at one time that there was danger of arseniuretted hydrogen being formed and inhaled as a gas. I believe the latest experiments have shown that this gas is not formed except there is free arsenic present in the color. In the case of Scheele's green or Paris green, each commonly contains a certain per cent. of free arsenic, so that in the presence of moisture and fermentation, arseniuretted hydrogen may be formed. In connection with those hearings which were carried on before the legislature, one of the gentlemen papered a large room with a heavy arsenical paper, and drew the air from the room through a solution which would take out the gas which would be formed. I think it was carried on for some weeks without any result.

DR. PENGRA: I would like to know whether the finish would not have something to do with it.

DR. DAVENPORT: As I understand it, the danger is of the color being mechanically removed. Of course if the finish is such as to prevent that, the danger is prevented. A rough finish, I presume, is more likely to be loosely attached than the smooth polished surface. There are a great many interesting questions arising from this. Take a paper which contains a grain of arsenic per square yard. Suppose that it covers a room larger than the average, so that we have sixteen rolls of paper. Such a room would have something like sixty grains of arsenic on the wall. It would take a good many years for the paper to fall off, and if one were in the room and inhaled all of it, it would be a very minute quantity. It seems as if people were more affected by very minute doses than we are accustomed to see when we give it medicinally. One writer says that it has a greater effect, but I do not know why.

DR. PENGRA said: I would agree with Dr. Davenport's statements that the arsenic would not become arseniuretted hydrogen, but the process of fermentation may produce that gas. During the past four years I have seen students to the number of from one hundred to two hundred, working in a laboratory where the gas was generated every day, each student probably generating from six to ten volumes in a moderate-sized room. They did this during six to nine months of the year. I have never seen a student suffering from anything like arsenic poisoning. I have seen students suffering from the fumes of amyl alcohol and from sulphuretted hydrogen, but never has there been a case of arsenic poisoning among students who have been there two years.

(To be concluded.)

DOMESTIC CORRESPONDENCE

LETTER FROM NEW YORK.

[FROM OUR OWN CORRESPONDENT.]

How Medical Men can Aid the Health Authorities.

There has been nothing more encouraging for a long time in matters pertaining to public health in this city than the appearance, recently, of Dr. Bryant, one of the Commissioners of the Metropolitan Board of Health, before the Academy of Medicine to ask for the cordial support and coöperation of the medical profession, and point out in a concise and emphatic manner the ways in which this end could be most satisfactorily secured. This event was rightly regarded by some of the speakers who took part in the discussion on this occasion as inaugurating a new era in the sanitary history of New York. As one of them, Dr. Andrew H. Smith, remarked, there have not in the past been those cordial relations between the profession and the Health Department that should have existed, and the latter has often

been regarded very much as an athlete who struck out from both shoulders, seeming to direct its blows on the one side against the public and on the other against the medical profession. Dr. Smith said that he had always believed the Board of Health should be the outcome of the profession and be in full sympathy, and that he could not but feel that Dr. Bryant's address would be of great service in promoting the sentiment of a community of interests between the two. When medical men could feel convinced that the Board was really a part of the profession, its usefulness would be greatly increased, and he had little doubt that, from this time forth, such would actually be the case.

The subject of Dr. Bryant's paper was, "How can the Profession Aid the Board of Health?" While there ought undoubtedly, he said, to be the most complete harmony between the two, and they should labor together, with common purposes, this had hitherto by no means always been the case, and they had, as a rule, been much greater strangers to each other than should have been the case. He first gave a sketch of the organization of the Board under the recent head of the Department, General Shaler, in which there were seven divisions, all subject to a semi-military system. From a practical point of view, however, this system was found to be more ornamental than useful, and circumlocutory rather than thoroughly efficient.

Dr. Bryant then spoke of the present organization of the Board, and described the more important changes which had been introduced under the administration of President Bayles, who was present by special invitation and addressed the Academy later in the evening. Among these changes was the relieving of the medical officers of the Board from the duty of making general inspections; and which is now performed by a corps of lay and police sanitary inspectors. There are 45 members of the sanitary police corps, each having charge of the inspections in one of the 45 districts into which the city is divided, and it is their special duty to systematically and thoroughly inspect all the tenement houses in their respective districts. The lay sanitary inspectors are 15 in number, one to each of the 15 larger districts into which the city is divided, and it is their duty to make inspections of buildings other than tenement houses, to investigate complaints made by citizens, and to deal with problems too deep for the sanitary police, by whom such problems are referred to them. All the medical sanitary inspectors are now detailed to the department of contagious diseases, and it is their duty to at once visit the locality of any case of contagious disease reported to the Board, and see that proper measures for isolation, disinfection, etc., are promptly carried out. When in any instance it is found that suitable medical treatment cannot be pursued, or that isolation of the patient cannot be secured, they advise that the case be removed to the hospital. They are especially charged that they must coöperate in every way with the medical attendant in charge of the case, and are always to treat the latter in accordance with the recognized principles of professional etiquette.

The medical inspectors, Dr. Bryant said, were thus restricted to work that was entirely professional, and the most ample opportunities were afforded by the present system for the scientific investigation of disease. In order to further this object promotion and the increase of salary are made dependent on faithful and intelligent service; and in addition, the services of Drs. T. M. Prudden, of the College of Physicians and Surgeons, and H. M. Biggs, of Bellevue Hospital Medical College, had been secured as pathologists of the Board. In the bureau of vaccination and contagious disease in animals expert diagnosticians have also been employed. Convenient and comfortable means are provided for the transfer of patients to the hospitals of the Board, and the admirably constructed Willard Parker Hospital, at the foot of E. Fifteenth St., is fitted up with all the modern appliances for the successful treatment of disease. It has accommodations for 75 or 100 cases of diphtheria or scarlatina, an efficient house physician, well trained nurses, and a medical board consisting of such men as Drs. E. G. Janeway, Joseph O'Dwyer, A. Jacobi, Stephen Smith, George F. Shrady and D. M. Stimson. The Reception Hospital, near by, is also under the supervision of the same medical board. On North Brother Island are the fine new small-pox hospital and five pavilions, each with accommodations for 25 or 30 patients, for contagious diseases other than small-pox.

At the present time, Dr. Bryant went on to say, the Board was paying special attention to the treatment of contagious diseases, and the urgent necessity for this was sufficiently attested by the fact that from the 1st of January to the 1st of September, 1887, there were no less than 1,575 deaths from diphtheria reported in the city. There was entirely too much indifference on the part of the public to such affections as diphtheria, whose widespread ravages are continuous in the community; while a single case of a disease like cholera, the prevalence of which would seriously interfere with its business interests, would at once cause profound excitement and receive the greatest possible attention. The Board had great odds to contend against, as it was estimated that from 15 to 25 per cent. of the cases of contagious diseases occurring in the city were never reported by the medical attendants in charge of them. It was estimated that from 25 to 30 per cent. of the births were also unreported.

At the conclusion of his paper Dr. Bryant suggested the following ways in which the medical profession could aid the Board of Health in its work:

1. By reporting at once all varieties of nuisances detrimental to health or dangerous to life.

2. By promptly reporting all cases of contagious disease. In this way many valuable lives could be saved and epidemics could be averted.

3. By enforcing strict isolation and employing suitable disinfectant and antiseptic measures in cases of contagious disease.

4. By reporting all cases in which isolation cannot be secured or proper medical treatment be carried out.

5. By visiting the Willard Parker Hospital and

thus being able to speak from personal observation of the advantages which it affords.

6. By being careful not to send patients with contagious diseases to the dispensaries.

7. By heartily coöperating with the medical inspectors of the Board in any case in which the latter are met with.

8. By reporting all food or drink adulterations coming under notice.

9. By reporting any instance observed of decaying fruit or other kind of unwholesome food offered for sale.

10. By reporting all defects in plumbing, light and ventilation observed in houses visited.

11. By paying special attention to the sanitary condition of the homes of patients.

12. By promptly reporting all births. This was of special service in securing the more general vaccination of infants.

13. By the appointment of a committee of physicians, not less than five in number, to confer with the Board of Health, whenever such conference seems desirable, on all matters pertaining to the public health.

At the end of the meeting a resolution was adopted to the effect that the President, Dr. Jacobi, should appoint a committe of five Fellows of the Academy, of which he (Dr. Jacobi) should be one, to confer with the Board of Health in the manner suggested by Dr. Bryant in his paper. P. B. P.

THE TREATMENT OF FRACTURES OF THE OLECRANON.

Dear Sir:—An editorial article in THE JOURNAL of last week, under the above title, recalls a device for maintaining apposition of fractured olecranon which I have found useful, and which may be thought worthy of adoption in the treatment of this fracture and that of the patella.

The evidence of its utility rests upon only one case of each kind, but the first afforded a fairly crucial test, as the subject was a very muscular young man, and the wide separation of the olecranon from the shaft of the ulna—nearly an inch—showed that the periepiphyseal fibrous tissues had been wholly disrupted. The injury was dressed immediately after its occurrence in the following manner:

A thick shellac-felt and splint was moulded to the anterior surface of the arm and forearm in extension, reaching from near the wrist to near the shoulder. Enough padding was employed to insure an unobstructed circulation under a tight dressing. A piece of tin about fourteen inches long and three-fourths of an inch wide was bent flat upon itself at one end, to hook over the lower end of the splint, which was then applied, the strip of tin lying along its external surface. The tin was then bent out at right angles at a point about four inches below the olecranon, after which a firm muslin bandage was applied, beginning at the hand. Upon reaching the angle in the tin, the roller was carried over the upper fragment in successive loops, each brought down to the angle and secured by one or more circular turns. Then the customary spiral turns to the shoulder were applied. Finally, the free end of the tin was bent back so as to draw more tense, if possible, the coaptation loops, and a few turns of bandage fixed it securely.

The dressing remained unchanged for a week, when it was partially removed and tightened a little by bending back the tin a trifle, although no separation had occurred, nor at the end of the second week, when passive motion was cautiously made. At this time I lost sight of the patient, who resided in a neighboring State; but the physician who had the final charge of him wrote me that the olecranon adhered perfectly, and evidently by bony union.

With many surgeons it is a grave objection to the adhesive coaptation strips that, if efficient, they cut into or inflame the integument at the point of pressure over the olecranon.

With the muslin bandage this does not occur. Its hold at the insertion of the triceps is sufficiently secure, and with the tin-loop point of resistance, the completed dressing must be as firm as that of M. Fraipont. Moreover, there is the additional advantage that it can at pleasure be tightened *in situ*, without disturbing it more than to undo the last few turns of bandage. J. R. BARNETT, M.D.

Neenah, Wis., Nov. 15th.

MISCELLANEOUS.

A CHECK TO THE ILLEGAL USE OF PHYSICIANS' NAMES.—Two weeks ago, under the heading of "A piece of Newspaper Effrontery," we commented on an article in one of the newspapers in which outrageous liberties were taken with a member of the profession. He was made to appear as having publicly recommended a certain nostrum. We learn that the gentleman whose name was thus unwarrantably used has had the public spirit to unearth the real author of the article, and bring him before one of the courts on a charge of criminal libel; also that it was only the fellow's prompt plea of guilty, accompanied with his formal promise not to offend further in that manner, that saved him from the penitentiary. As it was, he was fined roundly.—*New York Medical Journal*, November 19, 1887.

DR. FREDERICK HYDE, of Colorado, N. Y., one of the organizers of the American Medical Association, died recently at his home, in his eightieth year.

DR. KRAUS, editor of the *Wiener Medicinische Zeitung*, and author of Kraus "Medicinisches Lexicon," died recently, aged 59 years.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT U. S ARMY, FROM NOVEMBER 12, 1887, TO NOVEMBER 18, 1887.

Capt. C. B. Byrne, Asst. Surgeon, relieved from temporary duty at Ft. McHenry, Md., and will return to his proper station, Washington Bks., D. C. S. O. 242, Div. Atlantic, November 11, 1887.

First Lieut. F. V. Walker, Asst. Surgeon, relieved from duty at Post of San Antonio, and assigned to duty at Ft. Ringgold, Tex. S. O. 130, Dept. Tex., November 8, 1887.

OFFICIAL LIST OF CHANGES IN THE MEDICAL CORPS OF THE U. S. NAVY, DURING THE WEEK ENDING NOVEMBER 19, 1887.

P. A. Surgeon P. M. Rixey, ordered to the Naval Dispensary, Washington, D. C.